1960

University Business Administration in Years of Decision.

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UNIVERSITY BUSINESS ADMINISTRATION

IN

YEARS OF DECISION

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Management and Marketing

by
Thomas Edward Glaze
B. S., Louisiana State University, 1936
January, 1960

ACKNOWLEDGMENT

The writer gratefully acknowledges the many helpful suggestions and valuable assistance in the formulation of this study and the improvement of the manuscript given by members of the committee: Dr. Leon C. Megginson, Chairman, Dr. Daniel Borth, Dr. Perry F. Boyer, Dr. Lloyd F. Morrison, Dr. Stanley W. Preston, and Dr. William D. Ross. In particular, the time and counsel of Dr. Borth are appreciated.

The help and guidance of the many people at all administrative levels who graciously gave time in interviews is sincerely appreciated.

The services of Dr. W. Robert Bokelman, Office of Education, in making available certain unpublished materials is acknowledged with gratitude.

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ABSTRACT

National interest is focused upon the colleges and universities of America to see how they will meet their greatest challenge in history during the coming years of decision. Surveys indicate that by 1970 enrollments may have doubled; plant facilities may have increased by 13 billion dollars (one-half as much as in all previous history); and faculties, staffs, and operational costs may have doubled.

This study has explored the aspects of university business management in relation to this challenge. Ideas were drawn from interviews with university administrators from presidents to minor faculty and administrative staff. The consensus of these interviews was that the major problem areas were planning, organizing, financing and fund-raising, operational policies, and leadership.

Ways and means of solution, in particular the principles of management, were studied for their applicability to the problems. The principles were found to have an apparent universal application to universities and industries alike.

Planning must keep its perspective and balance, and short-range needs and pressures should be made to contribute positively toward the long-range objectives. University administrators must be able to select the strategic factors from the myriad of problems. University administration can do little about such trends as junior colleges and branch universities, or political and trade union activity. Nevertheless these factors must be recognized and may have a decided effect

upon the decisions of business management. Increased demand and short supply of teachers will cause an upward pressure on salaries. Proper administrative and financial balance between nine and twelve-months employees will be difficult to maintain. Emphasis on fringe benefits and participation in planning will assist these relationships.

University organization structures have tended not to be distinct nor well-defined, which is contrary to principles of good management. The organization structure represents people and more recognition must be given to the individual. Organizational delegation of authority is sometimes nullified in application by the veto powers of centralized management. For some unknown reason, universities have not promoted administrative training programs which have been found so beneficial to the perpetuation of management in industry.

In financing and fund-raising a public well informed as to the needs of higher education appears to be the single greatest need. The proportionate share of funds for higher education was found to be far below that of other state agencies. Tuition and fees from students present an inelastic demand and have little effect upon enrollment; the cost of living was determined to be the primary economic consideration. Corporation support appears to be the greatest potential for new sources of funds other than the government.

Operational policies of a university are largely matters of human relations in seeing that events conform to plans. Therefore, control measures, of which the budget is the most important, must be understandable and flexible and must emphasize preventive rather than corrective action. An excellent opportunity for self-evaluation of the

institution's programs is afforded in budget preparation if the university management reviews them with all administrators.

Expansion of present plant facilities should be preceded by studies for effective utilization of existing space, and by efficient maintenance programs to keep that space usable. The financing of building programs must not divert or reduce normal operating funds for education, but instead it must be supplied only by added funds.

Administrative staffs must be trained in and exercise effective leadership. It is the dominant factor which must permeate all the functions of university business administration.

INTRODUCTION

> Our colleges and universities are expected by the American public to perform something close to a miracle in the next 10 to 15 years. They are called upon to provide education of a continually improving quality to a far larger number of students - at least 6 million by 1970 compared to 3 million now. The sharp rise in births which began in the 1940's and which has already overcrowded the schools will shortly begin to strike the colleges. Meantime, with the college age group in our population at its lowest point in 25 years, enrollments in higher education are at the highest level in history because a steadily increasing proportion of young people are going to college.
>
> This great expansion of capable young people seeking education beyond high school represents an enormous opportunity and challenge for our society. But our institutions of higher learning, despite their remarkable achievements in the past, are in no shape today to meet the challenge. Their resources are already strained; their quality standards are even now in jeapordy, and their projected plans fall far short of the indicated need...but their difficulties are not so great that they cannot be overcome by the American people if they set themselves to the task.[1]

In this simple straight-forward statement is set forth the greatest peacetime challenge to the American people, and in particular to the universities, in our modern times. How will university business administration in the next decade meet this challenge and the problems of increasing enrollment that are coming as surely as a tidal wave which is already in sight?

These problems are by no means new or radically different. They are only extensions and projections of current problems. Their

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[1] Second Report to the President, President's Committee on Education Beyond the High School, July, 1957, (Washington: Government Printing Office, 1957), p. 3.

solution will not be found in any magical cure - the solution will come only through adequate careful planning and the application of sound principles of business management.

The significant difference in the problems of the next decade as compared to the last lies only in the size and acceleration which they will have. It is this tremendous increase in urgency, and the pressures of "too much with too little" that pose the real test of the efficiency and capabilities of university business administration.

The purpose of this study is to explore these problems of business administration and to offer some practical guides and perhaps some solutions. It is believed that these problems of efficient management are not peculiar to a university alone. It is believed that the basic policies and principles of good management tend to be alike and are universal, whether the organization is commercial or educational. It is believed that the same qualities of leadership, management, and organization are essential to both for efficient and successful operation. The solution to the problems which are becoming so critical is believed to be in the application of well-known and long-established scientific principles of business management. And finally it is believed that the greatest of all the problems is not one of finance or business directly, but rather one of leadership in management; that is, an administration that can exercise astute leadership and control, while at the same time eliciting the utmost in loyalty and support from those whom it must control.

The writer's concept of the term and application of management principles is perfectly expressed by Henri Fayol:

> For preference I shall adopt the term "principles" whilst disassociating it from any suggestion of rigidity, for there is nothing rigid or absolute in management affairs; it is all a question of proportion. Seldom do we have to apply the same principle twice in identical conditions; allowance must be made for different changing circumstances, for men just as different and changing, and for many other variable elements. Therefore principles are flexible and capable of adaption to every need; it is a matter of knowing how to make use of them, which is a difficult art requiring intelligence, experience, decision and proportion.[2]

The writer's concept of management of a university is that of a team. The team is composed of the governing board, the president, the vice-presidents and/or deans, and any other major administrative officers. However, since this study is primarily concerned with business administration, that element of university management is stressed. There is no inference intended that business management is any more important or bears any more responsibility than other segments of the team. Decisions of business management normally are made only in conjunction with other affected members of the team.

This study primarily confines itself to the business aspects of the problems which face universities during the next decade, although it is clearly recognized that management rests with the entire team of university administrators normally headed by the president. It must be emphasized that the business and the academic side of university administration cannot be separated, but must work hand in hand as a team. As will be emphasized, at no time can the business officer ever lose sight of the ultimate objective of the university, which is the

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[2]Henri Fayol, Administration Industrielle et Generale, translation by Constance Storrs, (London: Sir Isaac Pitman & Sons, Ltd., 1949), p. 19.

acquisition and transmission of knowledge. His is a reciprocal trust and responsibility. In all of his endeavors and handling of problems the business officer must be conscious of his responsibilities to the academic segment of the university and to its interests. He must be ever conscious that whereas he may be an important instrument, he is not the entire means by which the mission of the university is accomplished.

The predominant limitation of the study has been the practical extent to which the myriad of problems which will confront university business administration in coming years should be explored. To cover all of the problems exhaustively would be impossible. To explore fully the possibilities of any single problem would require infinite detail and an exhaustive study within itself. Therefore this study has given only a broad insight into possible methods of scientific managerial approach to the problems. These methods and principles are believed to be universal. Therefore, any particular institution may use the same general approach and perhaps the same general solution.

Problems which are believed to be most universal and most critical are discussed individually, but there is no implication that these represent all or even the most important problems for any particular university. It is hoped that for the individual university business officer the study may present a realization of problem areas that possibly have been overlooked and methods of approach which perhaps have not been considered.

The predominant source of data has been the use of available library references. Interviews and correspondence with university

administrators were used to determine as far as possible their plans and tentative solutions to the problems that they believe will confront their institutions in the next decade. Personal interviews were conducted in three types of institutions - a large state university, a small state college, and a large private university. Every possible contact was made at all levels of university administration to determine the opinions and plans of these administrators for the solution of the problems that seem certain to arise. Interviews were conducted with two presidents, four vice-presidents, ten deans, and fourteen heads of departments of these institutions. In addition, interviews were held with many people below the administrative level to determine the probable effect of some of the administrative actions which are covered in the study.

The method of inquiry was to conduct specific, but informal, interviews. It seemed clear from the start that personal interviews must elicit spontaneous responses and opinions, sometimes of a confidential nature. Therefore the subject was assured that he would not be identified with opinions or statements without specific approval. Questionnaires seemed poorly adapted to this type of information because they tend to be too objective. However, in order to secure reasonable consistency, the interviews were channeled in the same general lines of discussion.

From the foregoing it is apparent that this study does not purport to represent a scientific sampling with full coverage or statistical significance. However, a definite effort was made to secure varied viewpoints and experiences. These interviews therefore provided a

guide rather than a base from which further study was made from reference sources.

The system of presentation has been to take up the various problems in what appears to be the most logical sequence in which they can be expected to occur. The study starts from the common ground of basic facts and surveys as they exist today. Studies of these basic facts have been projected to 1970. No attempt has been made to establish the exact validity of the projections, but enough justification has been presented to establish the basic soundness of the projections, though their exactness may vary in degree. The first fundamental problem is visualized to be planning, then will come organizing, financing and fund-raising; then there will be problems of operating policies, plant operation and expansion; and finally the paramount problem that will be predominant throughout all of these efforts - leadership.

No effort has been made to explore the many possibilities that exist in greater efficiency of teaching techniques. The fields of television and radio, maximum effectiveness in class sizes, audio-visual projections, and many other possibilities all hold promise of increasing the productiveness of the present staff and faculty. However, these matters will be left to the resourcefulness and attention of the academic side of the management team who are always seeking means to improve their techniques. Improvements in these fields will help to alleviate some of the pressures of too small a teaching faculty. However, it is not likely that the improvements will remove the problems unless staff and facilities are also expanded.

The reader is cautioned to exercise care in the interpretation of

data and particularly in making comparisons with data presented in this study. Comparison of any particular class of institutions is extremely difficult to establish because there is very little standardization of data in reporting. Comparison for any individual institution must be examined very closely before drawing any conclusions. In most instances it is usually necessary to compare data only within a very small group, and a group about which a great deal is known of the methods of reporting. However, for purposes of this study aggregate statistics are used because they illustrate the areas of the problems, and also emphasize the magnitude of the problems on a national scale. The degree of impact on any specific institution is a matter for individual interpretation and decision.

At various points recommendations and suggestions are made for actions by the chief business officer. It is desired to make clear the realization that these actions may be beyond the authority of the business administrator. In many cases it may be impossible for him to take any action directly. The role of the university chief business officer varies widely in the organizational structure between one institution and another. In all cases however, he is a member of the management team of the university. Regardless of his formal authority, his advisory responsibilities are broad. It is to these broad responsibilities rather than to the actual field of authority that the suggestions of this study are addressed.

CHAPTER I

FOUNDATION FACTS OF THE PROBLEMS

The first postulate of this study is that there will be a vast expansion in university enrollment in the next decade - roughly approximating twice the present enrollment.

The basic assumption is made that universal restriction on enrollment will not be applied, and that higher education will not be denied to any person who is capable of study beyond the high school level. This belief is based upon the fact that equal rights and liberties have always been one of the fundamental principles of our Government. Much stress is placed on this point by political parties and politicians at all levels of government. Some institutions will undoubtedly increase their entrance requirements as a means of limiting enrollment. Such regulations have always been in effect in certain types of institutions. Some have had more restrictive requirements than others, and this situation can be expected to continue. However, in the aggregate, it is believed that there will be no universal increase in entrance requirements solely for the purpose of curtailment of the number of students to solve enrollment problems. Public sentiment, governmental pressure, and basic American tradition will be too powerful a deterrent to permit more than scattered efforts at curtailment. Restrictive measures may be used temporarily to influence public opinion or solve temporary problems, but it is believed the restrictions

will not be of a permanent nature.

This position was perhaps best expressed by Thomas Jefferson. His words could hardly have been any more prophetic or his admonition any more timely than when he wrote:

> It is expedient for promoting the public happiness that those persons whom nature hath endowed with genius and virtue should be rendered by liberal education worthy to receive, and able to guard the sacred deposit of the rights and liberties of their fellow citizens, and they should be called to that charge without regard to wealth, birth or other accidental condition or circumstances.[1]

I. Enrollment Projections

Actual reported enrollment in institutions of higher learning in the United States in the fall of 1958 was 3,258,556[2] (Chart I). Examination of the chart clearly indicates the steadily rising number of degree-credit students enrolling in institutions of higher education. The increase of 190,139 students, or 6.2 per cent, above the figure for the fall of 1957 was the seventh consecutive annual rise. In 1950 and 1951 there was a brief adjustment due to the fact that less World War II veterans were enrolled, and more younger men were involved with the Korean conflict.

The significant factor of the tremendous surge of "war births" has not yet reached the level of higher education - though it is already in the secondary schools. To forecast the impact on colleges

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[1] I. D. Weeks, "Can We Afford Higher Education?" College and University Business, Vol. 17, No. 2, August 1954, p. 46.

[2] U.S. Department of Health, Education and Welfare, Office of Education, Opening (Fall) Enrollment in Higher Education: 1958, Circular No. 544 (Washington: Government Printing Office, 1959) p. 1.

CHART I

Total Opening Enrollment of Degree-Credit Students
In All Institutions (Aggregate United States)
Fall 1947 through Fall 1958

Fall of	Enrollment	Change	Percent Change
1947	2,338,226	+260,131	+ 12.5
1948	2,408,249	+ 70,023	+ 3.0
1949	2,456,841	+ 48,592	+ 2.0
1950	2,296,592	-160,249	- 6.5
1951	2,116,440	-180,152	- 7.8
1952	2,148,284	+ 31,844	+ 1.5
1953	2,250,701	+102,417	+ 4.8
1954	2,499,750	+249,049	+ 11.1
1955	2,720,929	+221,179	+ 8.8
1956	2,946,985	+268,362	+ 10.0
1957	3,068,417	+121,432	+ 4.1
1958	3,258,556	+190,139	+ 6.2

Source: U.S. Department of Health, Education, and Welfare, Office of Education, "Opening Enrollment in Higher Educational Institutions, Fall 1957" Circular No. 518, p. 3.

_____. "Opening (Fall) Enrollment in Higher Education, 1958" Circular No. 544, p. 1.

and universities of this rise in population, various projections of enrollments for 1970 have been made. These estimates vary from lows of about 4,000,000 to highs of over 7,000,000. It is not the purpose of this study to debate the accuracy of these projections, nor to attempt any independent estimate. However, since the basic assumption of rising enrollments is so pertinent to the entire study, several of these projections will be presented for comparison. Though the projections may vary as to exactness - all are consistent in the central fact that enrollments in institutions of higher learning will increase greatly by 1970. Most estimates indicate that the increase will almost double the present enrollment by that time.

Ronald B. Thompson, Dean of Special Services, Ohio State University, has made an extensive survey and projection which has been summarized by Dr. John D. Long, Associate Professor, School of Business, Indiana University. This projection indicates an enrollment of 5,592,469 in 1970.[3] (Chart II). A further refinement and projection of the Thompson survey was made by Dr. Long in which he projects an enrollment of 5,877,860 in 1970.[4] (Chart III).

The approach of each of these studies is basically the same as most surveys on the subject. First, the estimated college age population (18-21) was projected to 1970 from U.S. Bureau of the Census figures. The percentage of students enrolled in the fall of 1957 plus the average annual percentage increase of enrollment were then

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[3] John D. Long, Needed Expansion of Facilities for Higher Education 1958-70 (Washington: American Council on Education) p. 29.

[4] Ibid., p. 33.

CHART II

TABLE D

Projections by Ronald B. Thompson of College-Age Youth and Enrollment in Institutions of Higher Education in the United States in 1970, by States

State	Estimated 1970 College-Age Population	1970 College Enrollment If Same Percent Attends as in 1955		1970 College Enrollment If Proportion Attending Increases in Uniform Annual Increments over 1955 Percentages		
		Percent	Enrollment	Percent Annual Increase	Percent in 1970	Enrollment
1	*2*	*3*	*4*	*5*	*6*	*7*
Alabama	262,438	19.5	51,175	.4	25.5	66,922
Arizona	107,634	42.4	45,637	.4	48.4	52,095
Arkansas	130,641	17.9	23,385	.4	23.9	31,223
California	1,183,141	53.0	627,065	.3	57.5	680,306
Colorado	156,924	38.2	59,945	.5	45.7	71,714
Connecticut	170,827	41.5	70,893	.4	47.5	81,143
Delaware	32,759	33.5	10,974	.5	41.0	13,431
Dist. of Col.	136,132	65.2	88,758	.2	68.2	92,842
Florida	391,794	27.3	106,960	.5	34.8	136,344
Georgia	346,661	17.9	62,052	.4	23.9	82,852
Idaho	59,401	22.6	13,425	.5	30.1	17,880
Illinois	750,872	34.6	259,802	.5	42.1	316,117
Indiana	397,130	33.5	133,039	.5	41.0	162,823
Iowa	227,422	29.7	67,544	.5	37.2	84,601
Kansas	152,814	37.1	56,694	.5	44.6	68,155
Kentucky	245,649	18.0	44,217	.4	24.0	58,956
Louisiana	301,778	25.5	76,953	.5	33.0	99,587
Maine	72,162	15.4	11,113	.4	21.4	15,443
Maryland	265,398	30.4	80,681	.5	37.9	100,586
Massachusetts	369,597	44.2	163,362	.4	50.2	185,538
Michigan	641,499	35.5	227,732	.5	43.0	275,845
Minnesota	273,035	35.2	96,108	.5	42.7	116,586
Mississippi	211,127	16.1	33,991	.4	22.1	46,659
Missouri	315,731	31.9	100,718	.5	39.4	124,398
Montana	51,825	27.6	14,304	.5	35.1	18,191
Nebraska	97,205	34.4	33,469	.5	41.9	40,767
Nevada	17,764	22.0	3,908	.4	28.0	4,974
New Hampshire	46,259	31.5	14,257	.5	39.0	18,041
New Jersey	396,256	26.5	105,008	.5	34.0	134,727
New Mexico	87,982	21.6	18,987	.5	29.1	25,579
New York	1,174,544	45.3	532,068	.5	51.3	602,541
North Carolina	418,987	17.0	71,228	.4	23.0	96,367
North Dakota	46,963	24.1	11,318	.5	31.6	14,840
Ohio	759,540	32.9	249,889	.5	40.4	306,854
Oklahoma	163,853	33.0	54,071	.5	40.5	66,360
Oregon	168,844	36.6	61,797	.4	45.6	76,903
Pennsylvania	766,607	28.7	220,016	.5	36.2	277,512
Rhode Island	77,990	28.9	22,539	.5	36.4	28,388
South Carolina	218,242	17.6	38,411	.4	23.2	50,632
South Dakota	52,759	28.7	15,142	.5	36.2	19,099
Tennessee	345,989	20.5	70,928	.5	28.0	96,877
Texas	978,535	29.0	283,775	.5	36.5	357,165
Utah	83,302	55.3	46,066	.3	59.8	49,815
Vermont	31,395	31.5	9,889	.5	39.0	12,244
Virginia	364,305	19.1	69,582	.4	25.1	91,441
Washington	264,620	33.6	88,912	.5	41.0	108,494
West Virginia	160,102	17.9	28,658	.4	23.9	38,264
Wisconsin	293,265	31.1	91,205	.5	38.6	113,200
Wyoming	34,131	24.9	8,499	.5	32.4	11,058
Entire U.S.	14,303,840	32.7	4,676,149	----------	39.1	5,592,469

Source:
Ronald B. Thompson, *The Problem of Rising College Enrollments* (P.O. Box 311, Yonkers, N.Y.: College Blue Book, 1957). These figures extracted from state tables.

CHART III

TABLE F 3

Projection of College-Age Population and Enrollment by States for 1970

State	Estimated 1970 College-Age Population (18-21)	College Enrollment, 1970				
		Assuming Same Proportion of College-Age Population in College as in Fall 1967		*Assuming Uniform Annual Increase by State over Fall 1967 Proportion of College-Age Population in College*		
		Percent Enrolled	Number Enrolled	Annual Increase, Percent	Percent Enrolled	Number Enrolled
1	*2*	*3*	*4*	*5*	*6*	*7*
Alabama	262,438	21.4	56,162	.4	26.6	69,809
Arizona	107,634	49.2	52,956	.4	54.4	58,553
Arkansas	130,641	20.9	27,304	.4	26.1	34,097
California	1,183,141	55.5	656,643	.3	59.4	702,786
Colorado	156,924	44.9	70,459	.5	51.4	80,659
Connecticut	170,827	43.3	73,968	.4	48.5	82,851
Delaware	32,759	35.0	11,466	.5	41.5	13,595
Dist. of Col.	136,132	59.9	81,543	.2	62.5	85,082
Florida	391,794	30.4	119,105	.5	36.9	144,572
Georgia	346,661	19.5	67,599	.4	24.7	85,625
Idaho	59,401	25.7	15,266	.5	32.2	19,127
Illinois	750,872	36.7	275,570	.5	43.2	324,377
Indiana	397,130	34.6	137,406	.5	41.1	163,220
Iowa	227,422	32.8	74,594	.5	39.3	89,377
Kansas	152,814	45.1	68,919	.5	51.6	78,852
Kentucky	245,649	20.7	50,849	.4	25.9	63,623
Louisiana	301,778	26.6	80,273	.5	33.1	99,889
Maine	72,162	21.3	15,371	.4	26.5	19,123
Maryland	265,398	33.3	88,378	.5	39.8	105,628
Massachusetts	369,597	51.1	188,864	.4	56.3	208,083
Michigan	641,499	38.5	246,977	.5	45.0	288,675
Minnesota	273,035	39.0	106,484	.5	45.5	124,231
Mississippi	211,127	16.8	35,469	.4	22.0	46,448
Missouri	315,731	36.2	114,295	.5	42.7	134,817
Montana	51,825	29.6	15,340	.5	36.1	18,709
Nebraska	97,295	40.0	38,918	.5	46.5	45,242
Nevada	17,764	24.8	4,405	.4	30.0	5,329
New Hampshire	46,259	35.6	16,468	.5	42.1	19,475
New Jersey	396,256	31.3	124,028	.5	37.8	149,785
New Mexico	87,902	27.2	23,909	.5	33.7	29,623
New York	1,174,544	44.7	525,021	.4	49.9	586,097
North Carolina	418,987	19.6	82,121	.4	24.8	103,909
North Dakota	46,963	30.9	14,512	.5	37.4	17,564
Ohio	759,540	35.2	267,358	.5	41.7	316,728
Oklahoma	163,853	37.0	60,626	.5	43.5	71,276
Oregon	168,844	42.0	70,914	.4	47.2	79,694
Pennsylvania	766,607	31.1	238,415	.5	37.6	288,244
Rhode Island	77,990	33.9	26,439	.5	40.4	31,508
South Carolina	218,242	18.8	41,029	.4	24.0	52,378
South Dakota	52,750	39.1	20,629	.5	45.6	24,058
Tennessee	345,089	24.8	85,805	.5	31.3	108,295
Texas	978,535	30.8	301,389	.5	37.3	364,994
Utah	83,302	58.4	48,648	.3	62.3	51,897
Vermont	31,395	34.9	10,957	.5	41.4	12,998
Virginia	364,305	21.3	77,597	.4	26.5	96,541
Washington	264,620	35.6	94,205	.5	42.1	111,405
West Virginia	160,102	19.8	31,700	.4	25.0	40,026
Wisconsin	293,265	33.7	98,830	.5	40.2	117,893
Wyoming	34,131	26.0	8,874	.5	32.5	11,093
Entire U.S.	14,303,840	35.3	5,044,057	----------	41.1	5,877,860

Sources and Explanations:

Column 2 figures taken from Ronald B. Thompson, *The Problem of Rising College Enrollments* (College Blue Book, 1957), pp. 6–18.

Column 3 figures for each state were obtained by dividing the state's fall college enrollment by its estimated 1957 college-age population. 1957 enrollment figures were taken from *Opening Enrollment in Higher Educational Institutions, Fall 1957*, Circular No. 518, U.S. Dept. of Health, Education, and Welfare, Office of Education (1958). College-age population estimates for 1957 were taken from Ronald B. Thompson, *The Problem of Rising College Enrollments*, cited above.

Column 4 figures were obtained by multiplying column 2 figures by column 3 figures.

Column 5 figures are those suggested in Ronald B. Thompson, *The Problem of Rising College Enrollments;* the only modification is that 1957 rather than 1955 is taken as the base year. The annual increments in the source cited were added to the 1955 proportion of college-age population in college. In this table they are added to the 1957 proportion.

Column 6 figures were obtained by adding the column 3 figures and thirteen times the column 5 figures.

Column 7 figures were obtained by multiplying the column 2 figures by the column 6 figures.

applied against this population projection. Assuming that the factors of estimate and increase remain reasonably constant, then the projection to 1970 should prove to be accurate.

Projections by the Educational Policies Commission of the National Education Association and the American Association of School Administrators indicate projections of a low of 4,368,756 and a high of 6,804,916.[5] This estimate was also based on Bureau of the Census figures. The estimate then projected percentage of students enrolled at estimated levels of 33, 40, and 50 per cent.

Projections by the Fund for the Advancement of Education assumed two bases - one assumed little change in proportion, the other assumed a continuation of the trend of the past fifteen years. These projections indicated a low of 4,905,000 and a high of 6,439,000 for 1970.[6]

Many other surveys could be cited, but would only serve to emphasize the same point. It appears to be useless to argue over whether the enrollment will be 5 or 6 or 7 million by 1970 - although the figure seems likely to be in that range. Since even the most conservative estimates indicate a great increase in enrollments, there seems to be little point in trying to develop exact or detailed estimates. Whatever the exact size, the increase in enrollment is certain and it will be great.

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[5] Higher Education in a Decade of Decision, A Report prepared by the Educational Policies Commission (Washington: National Education Association and the American Association of School Administrators, 1957), p. 31.

[6] Teachers for Tomorrow, Fund for the Advancement of Education, Bulletin No. 2, (New York: The Fund, November 1955), p. 50.

The major variables in these projections are the estimated size of the future college age population and the percentage of this group that will actually enroll in college. Each individual university must make a study of the trends, the conditions, and the variables affecting that university individually.

From these independent and varied projections it appears that the first postulate of this study is undeniable: There will be a vast expansion in university enrollment in the next decade - roughly approximating twice the present enrollment.

At this point it is desired to caution against the fallacy of judging the level of operations of a university by its enrollment alone. Enrollment is a very poor criteria of the size and scope of a university's operation, but unfortunately it is the measure most frequently applied. The responsibilities of a university, and its obligations to those who support it, extend far beyond the physical student body.

In 1953 - 54 the national percentage allocation of expenditures for resident instruction (exclusive of plant expansion) had declined to 33.3 per cent of total expenditures as compared to 43.6 per cent in 1929-30. During the same period organized research had increased from 3.5 per cent to 12.9 per cent of the total.[7] Much of the increase in expenditures in higher education is accounted for by the increased participation of the Federal Government in contract research activities and by increased interest and participation by private industry. Due to the ever-increasing demands of technological research, this trend

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[7] Higher Education in a Decade of Decision, op. cit., p. 128.

of increased expenditures in research appears likely to continue. All of these factors emphasize the necessity for looking beyond the actual student enrollment when forecasting and planning the future operations of the institution.

Nevertheless, even being cognizant of this danger of tying planning to enrollment, there are still many problems that are the direct result of enrollment alone. More students will require more classroom space, more equipment, more housing space, more feeding facilities, more recreational facilities and so on almost ad infinitum. When this enrollment growth is coupled with the research and extra services growth previously mentioned, it is obvious that great expansion of facilities must take place.

II. Plant and Physical Facilities Projections

Herein lies the second postulate of this study: There must be a vast expansion and replacement of university plant facilities over the next decade - roughly approximating 13 billion dollars.

The starting point for facts on this segment of the problem is an analysis of the present plant capacity. There are no authoritative national figures available about this capacity. Perhaps this very fact is illustrative of the apathy with which the public has been inclined to view the overall problem. The U. S. Office of Education is currently making such a survey which has not yet been published. However, this particular problem is also the simplest to answer for any individual university - simply through a physical inventory.

One method of approach to the problem of physical plant inventory

and cost was that used by the Commission on Higher Education in Louisiana. The Commission first made a complete inventory of all land and each building in each institution. In each building, information regarding the capacity, occupancy and utilization schedule of each room was secured. The tabulations of these data were reviewed by both the Commission and the institutions jointly. Studies and suggestions were made for better utilization of space. Projections of needed space were made through 1970-71 based upon estimated enrollments. Cost estimates were then projected in constant dollars of 1955 based upon continuing academic programs. The Commission clearly stated that new programs requiring special facilities would require additional dollars. However, estimates necessarily had to be on the basis of continuing programs for consistency. Any further inflationary trends would tend to increase the requirements for money. The needs were grouped into priorities of five-year periods. Programs were then recommended for the accomplishment of needed expansion.[8] The foregoing extremely brief sketch is given to highlight one method of surveying for needed facilities. Adaptations can be localized to meet the specific problems of individual universities.

One of the big questions to be answered then by the individual university administration is how much excess capacity there is in its present plant. A decision must be made on the relative merits of utilizing and expanding the present plant versus new buildings and facilities. In this period of "belt-tightening" some managements will show

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[8] Plant and Business Management for Higher Education in Louisiana, A Report by the Louisiana Commission on Higher Education, (Baton Rouge, La., 1956), Bol. V, Section V, p. 1.

an amazing ingenuity for utilizing space within their present plants, while other managements will complain about the situation.

As with the figures for enrollment - it is not the purpose to debate here the accuracy of the estimates of the size of the needs. Instead it is only desired to point out what these needs are and to establish the fact that they will exist to a serious degree in the next decade.

Dr. Long in his comprehensive survey of the subject estimates a low of about $12,000,000,000 and a high of about $15,000,000,000 in estimated funds for replacement and expansion of college physical facilities by 1970.[9] (Chart IV). Furthermore, he points out that this figure does not cover the cost of land acquisitions which may be necessary in many cases.

In order to establish the reasonable validity of this estimate of needs, the methods used by Dr. Long in his survey will be briefly outlined. The estimate was based on the 1958 purchasing power of the dollar. The estimated needs will be further increased by any decreased purchasing power or increased building costs. He divided the physical plant needs into two groups - residential and other-than-residential. The problem was approached from two basically different standpoints - national data studies and individual state studies. Within the area of the state studies he made three independent generalizations. (Chart V). Each of these methods was used as a check upon the other.

From all of these various approaches the ultimate conclusion of 12 to 15 billion dollars needed by 1970 appears reasonable. Even

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[9] Long, op. cit., pp. 18 - 25.

CHART IV

Estimates of Needs for Funds by 1970 for Expansion and Replacement of Physical Plant in All Institutions of Higher Education in the United States, Based on National Projections of Enrollment

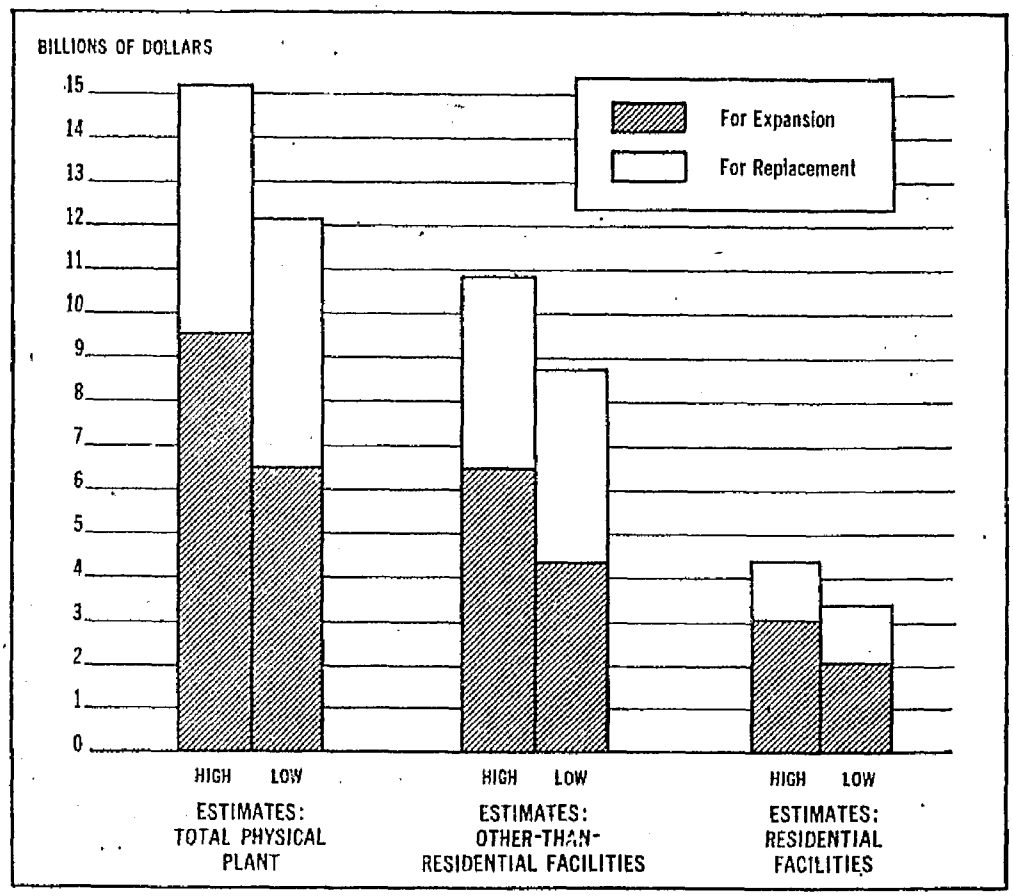
TABLE 2

(in millions of dollars)

Use of Funds	Estimated Need for Funds					
	Total Physical Plant		*Other-Than-Residential Facilities*		*Residential Facilities*	
	High	Low	High	Low	High	Low
1	*2*	*3*	*4*	*5*	*6*	*7*
For expansion	$ 9,560	$ 6,490	$ 6,500	$4,420	$3,060	$2,070
For replacement	5,700	5,700	4,320	4,320	1,380	1,380
Total	$15,260	$12,190	$10,820	$8,740	$4,440	$3,450

Source.—Figures developed in the text.

FIGURE 2



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John D. Long, Needed Expansion of Facilities for Higher Education 1958 - 70, (Washington: American Council on Education, 1958)

CHART V

Three Estimates of Needs for Funds by 1970 for Expansion and Replacement of Physical Plant in All Institutions of Higher Education in the United States, Based on Data in Studies Made in a Few Selected States

TABLE 4

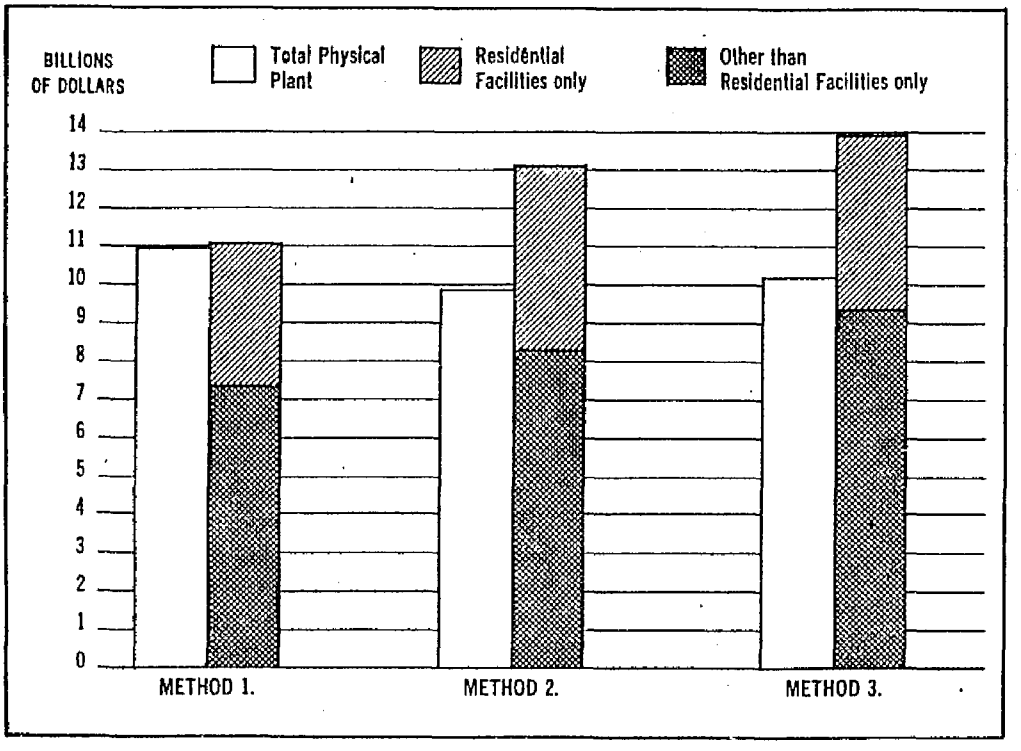
(in millions of dollars)

Description of Method Used	Total Physical Plant*	Other-than-Residential Facilities Only*	Residential Facilities Only*	Totals of Columns 3 and 4
1	*2*	*3*	*4*	*5*
1. Generalization based on 1957 enrollment proportions	$10,070	$7,200	$3,830	$11,030
2. Generalization based on projected 1970 enrollment proportions	9,820	8,220	4,830	13,050
3. Generalization based on marginal analysis of estimated needs per additional student	10,170	9,340	4,610	13,950

* Totals of columns 3 and 4 do not equal column 2 because of differences in schools represented. Two studies included only estimates of needs for total plant with no breakdown into categories. Four studies provided data only for other-than-residential facilities. Nine studies provided data for each category. The totals of columns 3 and 4 are built on a larger base of studies than are the totals in column 2. The figures in column 5 show the aggregate of the quantities reported in each category.

SOURCES.—Appendix 1, Table I for the first method; Table J for the second method; Table K for the third method.

FIGURE 4



Reproduced by permission of the author from:
John D. Long, Needed Expansion of Facilities for Higher Education 1958 - 70, (Washington: American Council on Education, 1958)

assuming certain inaccuracies of these figures, great expansion must take place.

The President's Committee on Education Beyond the High School stated that publicly supported institutions believed they could accommodate from 2.5 million to 3.8 million students by 1970. This would account for 41 per cent to 63 per cent of the projected enrollment of an estimated 6 million students. Private institutions estimated that they could support from 1.7 million to 2.1 million students - or 29 to 35 per cent of the total. "It may therefore be expected that, with foreseeable capital resources, all existing institutions could only accommodate about 70 per cent of the total projected enrollment in 1970. It is clear that accommodation of only 70 per cent would be tantamount to denial of equal educational opportunity."[10] As was stated in the introduction to this study, it is believed that American tradition and government will strongly oppose any such limitation or denial.

The present aggregate replacement value of the national "plant" of higher education is estimated to be about 25 billion dollars.[11] If this plant increases by 12 to 13 billion dollars by 1970 as the surveys have indicated, it is clear that the expansion in the next ten years, from the standpoint of finances, must be half as much as in all previous history of educational building. An expansion as great as this becomes very difficult to comprehend. Yet it appears that it must take place

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[10] Second Report to the President, President's Committee on Education Beyond the High School, July 1957, (Washington: Government Printing Office, 1957), p. 81.

[11] Ibid., p. 75.

unless some are to be denied the privileges and opportunities of higher education.

Therefore the second postulate of this study appears to be reasonable: There must be a vast expansion and replacement of university plant facilities over the next decade - roughly approximating 13 billion dollars of 1959 purchasing power.

III. Personnel Projections

The third postulate of this study then results directly and indirectly from the first two: There must be a vast expansion of university staff personnel, both faculty and administrative, in the next decade - approximately double the present number.

This study does not attempt to establish or to assert that because enrollment will double, staff and faculty will also double in exact degree. The term is used merely as an approximation, since enrollment figures themselves are an estimate. Larger classes and more effective teaching techniques can alter these proportions. On the other hand, more emphasis on research could increase faculty and staff in greater proportion than enrollments, since expansion in research is not related to enrollment. Therefore, the figures of the President's Report are used only as an approximation that staff and faculties will possibly double.

This phase of the problem was given particular attention by the President's Committee on Education Beyond the High School. In brief summary the Report stated that at present there are more than 225,000 full-time and part-time instructional staff members in 1,900 colleges and universities. Somewhere between 15,000 and 22,500 annually must

be recruited in the next dozen years. Graduate schools award only about 9,000 doctoral degrees annually of which no more than 5,000 of these persons go into teaching. More than 35 per cent of college teachers are already 45 years of age or older. Therefore faculty reduction by death and retirement will accelerate at a time when student population is increasing from the present 3 million to an estimated 6 million students.[12]

Administrative staffs must also increase to execute effectively the present programs and future expansion. In fact, present trends indicate that administrative staffs are being expanded faster than teaching staffs. In November, 1955, there were 301,582 different persons in all types of positions on the faculties of institutions of higher learning in the United States. This number represented an increase of 33,554 (or 12.5 per cent) over November, 1953. Among all types of faculty positions the largest proportionate increase was 33.8 per cent in the faculty for general administration. The smallest increase (6.1 per cent) was in faculty for extension activities. Research faculties increased 15.8 per cent and resident instruction increased by 11.0 per cent.[13]

It therefore appears reasonable that the mean estimate of 225,000 increase in personnel by 1970, as indicated by the Report to the President, is a reasonable projection of the personnel expansion. These figures are impressive, but become startling when it is realized that

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[12] Second Report to the President, op. cit., p. 28.

[13] Faculty in Institutions of Higher Education, November, 1955, U. S. Department of Health, Education and Welfare, Office of Education, Circular No. 504, May, 1957, (Washington: Government Printing Office, 1957), p. 2.

for every staff member at present there may be a need for two in 1970.

Once again, assuming inaccuracies of these estimates of personnel, it appears that a great expansion must take place. The third postulate therefore appears reasonable: There must be a vast expansion of university staff personnel, both faculty and administrative, in the next decade - possibly double the present number.

IV. Operational Projections

The fourth and last postulate of the study is that operational expenses will increase greatly by 1970 - approximately doubling the present level of operations. Any further inflationary trends will tend to magnify the problem - and certainly all evidence seems to indicate that this trend will continue in the next decade.

Since it has already been pointed out that total enrollment and total staff can be expected to double, while the entire "plant" should be increased by 50 per cent, then it seems that operational needs must increase in proportion. If inflationary trends continue, it would appear that operational costs will double along with the other expansion that will be in progress.

Total current operational expenses for all institutions of higher education in the United States for 1953-54 were $2,882,863,551. This figure represented an increase of 18.5 per cent over the corresponding total for 1951-52. Of this amount 56.2 per cent was used by publicly controlled institutions. Expressed another way, this expenditure represented 1.01 per cent of the total individual income of the nation before personal income taxes.[14]

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[14] Statistics of Higher Education: Receipts, Expenditures and Property 1953-54, Chapter IV, Section II, (Washington: Government Printing Office, 1957), pp. 48 - 49.

Tentative figures for the same survey for 1955-56 indicate a total expenditure for the period of $3,524,743,721.[15] (Chart VI). The expenditure represents an increase of 22.3 per cent over 1953-54. Even more important it pointedly indicates the trend of the increasing expenditures. Publicly controlled institutions expended 55.6 per cent of the total.

It seems safe to say that if the American public is to meet the demands for higher education of the next decade as have been outlined, then operational expenditures must keep pace with the rise in enrollment, rise in staff, and rise in facilities. Even if purchasing power becomes and remains stable, the fourth postulate appears to be reasonable: There will be a vast increase in operational expenses by 1970 - approximately double the present level of expenditures.

The significance of all these statistics does not lie in their size alone. To university business administration it is the tangible evidence of the problems to come. It is the tangible evidence of the challenge and responsibilities that management must meet. Each individual business officer must make a factual, impersonal and realistic appraisal of the problems as they affect his university. The national problems have been outlined. To some degree it is almost certain that the national situation will affect every institution of higher learning, but they will not all be affected alike. Therefore business management must interpret the probable impact of these problems in its own case. Probably many managers will fail to realize the significance of the

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[15] Statistics of Higher Education: Receipts, Expenditures and Property 1955-56, Unpublished data of survey, U.S. Department of Health, Education, and Welfare, Office of Education, 1959.

CHART VI

Current Fund Expenditures
Aggregate U.S., 1858 Institutions
1955-56

Educational and General Expenditures:		%
General administration and general expense	$ 358,379,629	10.2
Instruction and departmental research	1,148,509,889	32.6
Extension and public services	141,074,429	4.0
Libraries	86,133,064	2.4
Operation and maintenance of physical plant	326,259,564	9.2
Organized research	506,097,474	14.4
Organized activities related to educational departments	222,344,911	6.3
Total Educational and General Expenditures	$2,788,798,960	79.1
Auxiliary enterprises	639,720,731	18.2
Student aid for scholarships and prizes	96,224,030	2.7
Total Current Expenditures	$3,524,743,721	100.0

Source: "Statistics of Higher Education: Receipts, Expenditures and Property 1955-56." Unpublished data of survey, U. S. Department of Health, Education, and Welfare, Office of Education, 1959.

impact that is coming - but fortunately these will be in the minority. Already there is evidence everywhere of the planning and expansion to meet the demands.

Social problems of an increasingly complex society are having a great effect on decisions and the direction of higher education. The problems of integration are being felt with increasing severity. World problems and world tensions place new considerations on the requirements of higher education. Universities are reappraising their place and their responsibilities in adult education to determine just what are their obligations to the general public through conferences and training schools of many types.

Although not as publicized as increasing enrollment, these problems and many more are critical to business management. They are a part of the changing society, hence basic to the changing requirements of higher education. Most of these problems are beyond the scope of his authority, but it is the responsibility of the business officer to keep himself informed about these developments and continue to be aware of their implications in his operations.

V. Summary

In addition to the infinite individual problems that will arise, it is believed that every university business administrator will be faced with the fundamental problems of the four basic postulates of this study:

1. There will be a vast expansion in university enrollment in the next decade - roughly approximating twice the present enrollment;

2. There must be a vast expansion and replacement of university

plant facilities over the next decade - roughly approximating 13 billion dollars of 1958 purchasing power;

3. There must be a vast expansion of university staff personnel, both faculty and administrative, in the next decade - possibly double the present number; and

4. Operational expenses will increase greatly by 1970 - approximately doubling the present level of operations.

The approach and solution to these problems is believed to be through the application of basic universal principles of business management. These principles are not unique to industry or to any particular type of organization, but apply equally to the solutions of the problems of a university.

CHAPTER II

PLANNING

I. General Considerations and Basic Principles

This chapter will consider the varied aspects and principles of planning. Planning is almost universally accepted by standard texts on the subject as one of the basic functions of management. Henri Fayol, the noted industrialist, writing in 1916, listed planning as the first element of management. Although Fayol was studying primarily the mining industry when he set forth his views, they illustrate the universality of the principles of management. His study is equally applicable to university business administration today.

Fayol explained his principles of planning in the following manner:

> To foresee in this context, means both to assess the future and make provision for it;...The plan of action rests: (1) on the firm's resources (buildings, personnel, public relations, etc.) (2) on the nature and importance of work in progress. (3) on future trends which depend partly on technical, commercial, financial and other conditions, all subject to change, whose importance and occurrence cannot be pre-determined.[1]

The university business officer, when facing the future, must base his plan of action on these same principles. He must first take an inventory of the resources with which he has to work and recognize the problems which are involved, assess the nature and importance of the work and programs that are in progress, and interpret these programs

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[1]Henri Fayol, Administration Industrielle et Generale, translation by Constance Storrs, (London: Sir Isaac Pitman & Sons, Ltd., 1949), p. 44.

and resources into future plans and objectives through the medium of selecting the strategic factors to determine the plans. These objectives and plans will be subject to many variables to which adjustments will have to be made. In essence, this is the problem of planning which management must solve.

Universality of principles

Frederick W. Taylor, often referred to as the father of scientific management, expressed the opinion of the universality of the principles of management. He specifically referred to the principles as also applying to universities:

> This paper was originally prepared for presentation to The American Society of Mechanical Engineers...It is hoped, however, that it will be clear to other readers that the same principles can be applied with equal force to all social activities: to the management of our homes; the management of our farms; the management of the business of our tradesmen, large and small; of our churches, our philanthropic institutions, our universities, and our governmental departments.[2]

In view of the fact that the future is characterized by uncertainty and change, planning is a necessity. Future events are uncertain, and the farther in the future, the less the certainty. With increased uncertainty, the possible alternatives become greater, and the assurance of any decision is diminished. Management decision-making therefore becomes a highly critical and vital requisite to the success of the enterprise, but this decision-making must be based upon sound planning and sound principles of management. Here the management team can utilize basic principles because they tend to be

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[2]Frederick W. Taylor, The Principles of Scientific Management, (New York: Harper & Brothers, 1923), p. 8. (Underlining not in original)

universal as indicated by Taylor. Trends indicate the direction of some changes. Studying these trends helps to take some of the uncertainty from the future, and establishes direction for the planning.

Principle of recognition of the problem

Goetz in his book on management planning states, "First, and perhaps most difficult, is the recognition of the existence of a problem: that an unsatisfactory condition exists, that improvements are needed, that better alternatives must be sought."[3] The wisdom of this statement can scarcely be overemphasized. The truly astute manager is one who can recognize problems before they become acute. Some people seem to have a remarkable ability in this regard. Almost any manager can take corrective action, but only the truly efficient manager senses the need of action in time to make corrections smoothly. He plans in order to minimize the need for corrections.

Professor Geroges Doriot of the Harvard Graduate School of Business Administration tells his students that the most difficult part of the work is done by the School when it indicates the area of the problem in a given study.[4] The significance of this teaching becomes apparent to a manager when he attempts to isolate and determine exactly what his problem is. Often the solution is not so difficult after the source of the difficulty has been determined.

One method of recognizing problems is to maintain a wide contact

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[3] Billy E. Goetz, Management Planning and Control, (New York, McGraw-Hill Book Co., Inc., 1949), p. 166.

[4] Class lecture, October 1936, Professor Georges Frederic Doriot, Harvard Graduate School of Business Administration.

with outside institutions. These outside contacts can be maintained by attending association meetings, through reading, through visiting other institutions, and by any other means which will broaden the scope of observations. Sometimes it is necessary to bring new personnel into the organization to secure a new and fresh approach to the problems. Unless such contacts are maintained with outside institutions, it is easy to "get into a rut" and not even be aware that a problem exists. A business officer has but to look within his own organization to find individuals that fit this description. Some individuals never realize that a problem exists - they must be shown. However, the officer must make certain that the same criticism does not apply to himself.

Principle of coupled planning and control

Control, another basic function of management, is peculiarly dependent upon planning. Control is the function of making sure that events conform to plans. This concept means that planning objectives must be established. Planning must have an objective from which control keeps the plan from deviating. The objective basically gives the purpose and the place to put the emphasis of the endeavors of the enterprise. It gives direction which the policies, procedures, budgets and programs are designed to carry out.

The chief business administrator must plan in order to control. It will be impossible for him to determine whether or not he is on the right path unless he has first determined through plans where that path is to lead. It is also fundamental that it may be necessary from time to time to change these plans as circumstances warrant. However, this flexibility cannot be used to wander aimlessly. Instead, plans should be changed only by as careful consideration as that which established

the plan in the first place. Only through this linking of these functions can control and direction be accomplished.

Henri Fayol effectively described the dangers of the lack of planning when he said,

> Lack of sequence in activity and unwarranted changes of course are dangers constantly threatening businesses without a plan. The slightest contrary wind can turn from its course a boat which is unfitted to resist. When serious happenings occur, regrettable changes of course may be decided upon under the influence of profound but transitory disturbance. Only a programme carefully pondered at an undisturbed time permits of maintaining a clear view of the future and of concentrating maximum possible intellectual ability and material resources upon the danger.[5]

Illustrating the difficulty of planning and control, one dean emphasized in an interview that aggressive departments and "dreamers" would continually "ask for the moon." Indeed, to some degree this trait is desirable. However, it is necessary to separate facts from emotionalism in these situations. The person performing the business functions must be prepared to offer facts to assist the university administration in rendering a decision on this type of request. Close coordination with the academic administration and particularly with the academic deans is helpful and necessary in correctly appraising requests.

To be more specific, a constant problem that will grow with increasing enrollment is the request for more classes, hence more professors. Although this problem is very closely related to educational matters, it also has decided business aspects. Unless these requests are carefully controlled, the number of classes and professors could

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[5]Fayol, op. cit., p. 49.

quickly exceed the funds. Planned projections is a helpful control device in this regard.

To accomplish this planning for control, one institution has set up within the office of the registrar a section for institutional studies. In some institutions the section of institutional studies reports to the academic officer, and in some it reports direct to the office of the president. Its exact placement depends to a great extent upon the operation of the particular institution. However, the office of the registrar seems to offer better facilities and a more objective approach. The important point is that such a section is in operation to perform this important function. It is the job of this section to forecast not only for the entire institution, but even for each individual class the projected enrollment for the coming year. For these purposes it is not sufficient to forecast only the gross enrollment of the institution, but efforts are made to forecast into what areas these students will go. These projections are sent in advance to the department head for his comments. Any requests can be factually justified or refuted in the light of these projections. The forecasts have the distinct advantage of removing the emotional element from the situation.

The projections as outlined give a guide to the management team of the university. The academic officer and deans study these trends and relate them to the probable patterns of economic trends and student choices. In joint action, normally with the business officer, planning is thus executed on a coordinated basis.

Whereas it is admitted that the projections and forecasts may not be exact, nevertheless they are the best guides that are available,

since they are based upon the available facts. There are two widely accepted methods of projecting enrollments for planning purposes. One is the projection of the college-age population to enrollment, the other is known as the cohort-survival or grade-succession technique. The college-age type of projection is primarily referred to in this study. However, since the cohort-survival method is an alternative, it will also be described briefly.

The cohort-survival technique involves an analysis of the survival rates of students from the first grade through the various elementary grades ultimately to become students at a university. For any individual university it is probably the most accurate method because it relates its projection more closely to local conditions. Enrollment in a university is analyzed to determine which parishes (or counties) make the largest contribution to the student body. Birth rates and elementary and high school enrollments in these parishes are studied as to how their patterns vary from the rest of the state. On this basis the production of high school graduates is forecast for these parishes and the remainder of the state. A table is then prepared classifying the parishes by births, enrollments, and high school graduates. Trends are then noted and estimates made on the basis of first grade enrollments. Future second grade enrollments are projected based on past trends. Continuation of this process from grade to grade finally results in an estimate of the high school graduates. The varying rates of the significant parishes are then applied to the estimated numbers of high school graduates which yields the expected enrollment in the university for succeeding years. It can be observed that the above method is very exacting, but tends to produce very accurate results where local

conditions can be determined with exactness.

For national comparisons the college-age projection appears to be a satisfactory system for analyses. The reason for its accuracy is that nationally the percentage of students going to college tends to be very constant by states, and the percentage of increase also tends to be very constant. Therefore, by applying these percentages to the college-age population figure, the national projection tends to be accurate. Another advantage of this type of projection for wide comparison is that it is much simpler to understand. Regardless of which type of projection is studied or employed the important point is that it will give a foundation of facts upon which realistic planning can be done.

Principle of evaluation of plans

The principle of constant evaluation of plans is important. When the business officer assesses his present resources he must recognize that education and research are highly changeable products. Circumstances and conditions existing today not only can, but probably will, be vastly different in the future. For example, it is not sufficient to determine the number of students in a given physics laboratory today and simply provide double space for 1970. The basic requirements of a physics laboratory in 1970 may be entirely different from those of today. In addition, the trend of enrollment may greatly increase or decrease for physics classes by 1970.

Goetz termed this constant evaluation the "periodic review and reconsideration." He said,

> Even after inspection and review of the immediate results of the adoption of a new or changed program have proved its

> merit, management should not regard the matter as finished business. Provision should be made for periodic review and reconsideration of the enterprise's operating program.[6]

In facing the immediate problems of the impending crisis of enrollment in higher education, university business management must be aware of the long-range evolution of educational development and its underlying problems. Although this study deals primarily with the more immediate and crucial problems of the next decade, nevertheless the management team must be cognizant of significant trends in education. Many factors other than increased enrollment will have their effects upon decision-making in the long-range planning.

The objectives of a university must determine the course of long-range planning. These objectives in turn are accomplished through a series of steps or phases which can measure the degree of accomplishment and give definite intermediate points of progress toward the goal. There must be progressive steps through which the plan moves. Almost universally among the institutions studied there were plans and programs projected into the future. These programs were set up in definite steps or phases in which the plan was to be accomplished. For example, a reorganization of one university was set up to be accomplished in three phases. A schedule was established for each phase so that a reasonably definite time was set for accomplishing each step. Such a system of projections gives not only direction to the plan, but also provides a tentative time for the various steps to be accomplished.

Principle of balance between long-range and short-range objectives

Planning must coordinate and balance short-range pressures with

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[6]Goetz, op. cit., p. 190.

long-range objectives. The desirable goal is that all short-range plans contribute positively toward the long-range objective. For example, there will be pressures to provide space or equipment immediately, but perhaps the requested item does not conform to the long-range plan of the university. These pressures must be fitted to the long-range plan possibly at the expense of delay, or even lack of fulfillment of the short-range need.

The management team must keep the entire faculty informed about the long-range objectives of the university. When this is done, then there is a better understanding and more cooperation on the part of the faculty when it is necessary to deny certain requests that are contrary to the objectives of the institution. Through the use of such leadership management can better accomplish its objectives, both long-range and short-range.

One of the most serious dangers in using short-range expedients as a panacea for the problems of the present is that the expedient will tend to become permanent. Every administrator can look around his campus and see some evidence of hastily conceived and hastily executed buildings or plans that have now become permanent problems.

> It is not desirable to build now the academic slums of the 1970's, nor to clutter campuses with "permanent temporaries." To the degree that long-range planning exists for an institution, its plant expansions must be built for the future.[7]

This description is very significant. The experiences should serve as a warning against lack of, or too hasty, planning.

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[7] Higher Education in a Decade of Decision, A Report prepared by the Educational Policies Commission (Washington: National Education Association and the American Association of School Administrators, 1957), p. 133.

Principle of participation in planning

Strong opinions were expressed in interviews with administrators in the course of this study that planning should be on a cooperative basis. These opinions express another fundamental of planning which is set forth by Koontz & O'Donnell:

> What is often forgotten is that participation in planning is important at all levels in organization. It is even wise to have participation in major planning by all the managers in an enterprise...Not only may these be of value to those making plans, but loyalty toward major plans can be nurtured from a feeling of participation.[8]

Faculty and staff participation in planning has many advantages. In the first place, the planning then originates closest to the point of ultimate execution. The person closest to the problem should know the most about it. In the second place, it makes the personnel feel that they are a part of the organization and responsible for its future. By decentralizing the planning, many more ideas will be generated. This can be disadvantageous because it requires more review and study of many useless ideas. There is also the psychological disadvantage that some people may feel slighted because their ideas were not accepted. At the same time, however, more useful ideas will also appear.

Small conferences, and if necessary even committees, appear to be the most satisfactory system of planning from the bottom up and allowing participation at all levels. Many of the objections as outlined can be eliminated by conference discussions.

Participation in planning in no way removes the responsibility for

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[8]Harold Koontz, and Cyril O'Donnell, Principles of Management, (New York: McGraw-Hill Book Co., Inc., 1955), p. 453.

planning from management - it is only a means to assist them and to improve the quality of the planning. And most important, the participation in planning cannot relieve the business officer from the responsibility of decisions that he makes.

However, it is important to note that the business officer consults with other members of the university management team. He makes the decisions and bears the responsibility for only that part of the operations over which he has control. That is to say, he does not make the decisions that affect other parts of the management team, such as the academic officer or other major administrators. These decisions are normally made by the president as head of the management team.

Concept of idealism versus realism in planning

Idealism and realism are basic concepts that are important in the planning process. On the side of realism - if the officer looks to those programs which are within the assured goals, there will be far less shifting and changing of objectives. Goals will be more readily obtained and perhaps a greater appearance of success will be established. On the other hand, this approach tends to be unprogressive and lacks imagination. A university should be a leader in progress and new ideas. A completely realistic approach to planning would tend to discourage this leadership.

On the side of idealism - if the officer sets the ideal as the goal, failure is inevitable in a large number of instances. It is usually impossible to attain the ideal in planning for a university just as for an industry. However, idealism has the distinct advantage of setting a goal at the most desirable point. Even a compromise

usually has the advantage of being better than a realistic factual objective. Within these two limits management should establish its concept of planning. It is believed that the most practical approach is one of a compromise. An ideal objective should be tempered by the realistic facts of the problem. In this manner university planning should attain its desired objective of leadership without being unrealistic in its planning.

The point is again emphasized that the responsibilities for decision-making are normally a management team affair. The decisions are made in conjunction with all other interested segments of the university. There is no implication that these policies are solely the responsibility of the business administrator. However, since this is a study of business management, those are the aspects that are stressed.

A practical application of the above principles was observed in a case which involved the head of one department at a major institution. The issue had arisen about the construction of a certain building. The department head had an ideal in mind with which he did not wish to compromise. The business officer had practical limitations in the form of only limited funds available. There was a conflict of idealism versus realism. The head of the department said that he would do without rather than compromise with anything other than the ideal which he felt the department needed. The business officer tactfully explained that circumstances prohibited the ideal, and convincingly explained why. He convinced the department head that whereas the ideal was desirable, nevertheless a compromise accomplished practically all that was desired, and everything that was essential. By tempering the ideal with realism in a tactful manner, it was possible to accomplish a satisfactory

compromise in this instance.

A peculiar problem was observed in the field of agricultural research that could be applied to some other types of research and extension activities. Because of the farmer's reaction, there was a general hesitancy to set up any type of demonstration equipment or facilities that were ideal. The farmers could contend that ideal tests or facilities were impractical and not typical of what they could afford or accomplish. On the other hand, the problem was equally bad if the facility was set up in a manner similar to the operations of the average farmer. The reaction then was that little progress toward the ideal was indicated and the farmer had nothing to learn from the demonstration. It is a simple actual illustration of how the business officer must compromise the ideal with reality. Astute planning is essential.

Concept of policy in planning

It is believed that the business of a university is to try new innovations and seek new knowledge. "Be not the first by whom the new is tried, nor yet the last to lay the old aside," is an adage that is believed to be not so applicable to a university as to industry or commercial ventures. This concept presents a basic problem of policy in planning. As stressed before, this policy is not one for the business management alone, but is decided upon by the entire management team. Normally, the impetus for new innovations will originate with the academic side of management. Then, in conjunction with business management the details and means are worked out to accomplish the desired results.

Most universities have a mandate to seek new knowledge, which by its very nature implies trying new things. The laws of Louisiana are

typical of such a mandate. "It (the university) shall seek to expand the areas of knowledge and understanding through scientific and speculative inquiry and in various ways shall encourage and assist the people of the state to a fuller development of their resources."[9]

To the university business administrator this mandate presents a somewhat different problem than to a commercial manager. For example, in considering a computer it might be prudent for a commercial manager to wait until computers were developed to a high degree of perfection. He would then reduce the dangers of obsolescence and would be able to install a much improved system. A university business officer considering his recommendations on the same problem must recognize the responsibility of the institution for being a leader in the field of exploration and teaching of new techniques. If his university waits until perfection is achieved, it has not fully met these responsibilities, and has lost the prestige of leadership in the field. This boldness of trying new innovations is often accompanied by mistakes and criticism. Therefore, the business administrator must be doubly careful in his planning operations that good judgment is exercised even though he pushes boldly ahead with new ideas and programs.

It should be made clear that these recommendations for trying new plans do not mean that management is to experiment with new methods in the actual conduct of university business functions. It must certainly keep abreast of developments, and use the best methods. However, the concept as expressed does not apply to the operations of the business

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[9]Louisiana Revised Statutes, Acts of 1940, No. 196, Article I, par. 2.

office. Instead the concept applies to the recommendations that the business administrator will make and the viewpoints that he will maintain toward progressive activities of education and research within the institution.

II. Personnel - Some Problem Areas of Planning

Problems of personnel, like other problems of management, tend to be universal in industry or in a university. It is a matter of influencing men in accomplishing the mission of the enterprise. The full and active support of every member of an enterprise is necessary for its complete effectiveness. A university, like industry, has certain policies, whether they are written or not, which carry out the purposes of the institution. To implement these policies through personnel of the institution it is necessary to develop and hold skilled managers; subordinates must be recognized and promoted; and the status and prestige of subordinates must be improved. Through these means employees are motivated to their highest qualities of production. Greater emphasis toward these qualities and results of leadership will be given in a later chapter.

The essence of planning for the personnel problems of a university is the recognition that management gets things done through epople. There are many scientific devices to help a manager be sure that people are doing that which was intended, but the problem of control is still one of human relations.[10]

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[10] Koontz and O'Donnell, op. cit., p. 567.

The nine-month and twelve-month employee relationship

There is one personnel problem of a university that is unique to an educational institution, that is, the place of the nine and the twelve-month employees. Nowhere in industry are there permanent nine-month employees working side by side with permanent twelve-month employees - and in many cases doing very similar work. Such a relationship presents the constant problem of keeping this relationship in proper perspective and proper balance. In making any comparison of salaries it is necessary to compare on a common base.

Comparisons of income are difficult because the nine-month employee has the privilege of earning extra income either by teaching or otherwise during the three open months. The twelve-month employee in turn has vacation rights which the nine-month employee does not have. Each has a different holiday system. There are so many variables in any comparison that only a general observation can be made. Nevertheless the problem presents a constant source of discussion and possible dissension by the personnel of the institution. For these reasons it is the responsibility of the business officer to be constantly mindful of this difference in status of the personnel and make constant studies of the financial relationships as far as possible. It is his duty to keep the president informed on these matters - since the business officer himself does not have the power of fixing salaries as he has only an advisory capacity.

Psychological effects of emphasizing lagging salaries

A peculiar problem has begun to creep into institutions of higher learning which is the direct responsibility of the business officer to

help combat. It more or less follows the pattern of the old adage that if you tell a man long enough that he is sick - he will be sick. In recent years there has been a great flood of publicity (and much needed publicity) concerning the extreme degree to which teachers' salaries have lagged behind those of every other class. These allegations were true - and still are true. However, they have tended to complicate an already aggravated condition. They have made the professor so extremely conscious of his poor financial position that he becomes "sicker" perhaps than he really is. Further aggravation of this feeling is found in industrial communities where a professor does not enjoy the prestige that is accorded in smaller or less industrialized communities. Normally, professors in an industrial community do not belong to exclusive clubs and may be conscious of this difference that is sometimes reflected in social standing.[11]

The magnitude of this salary differential problem is illustrated in a study by Beardsley Ruml:

> In 1908 professorial salaries of $5,000 a year were not uncommon. To maintain professors at the 1908 standard of living a $5,000 salary gave them, 1955 salaries would have to reach the rare figure of $19,200. The real income of faculty members declined 5 percent below the 1940 level by 1954. Yet in this same period, the real income of lawyers, physicians, and industrial workers rose from 10 to 80 percent.[12]

Another of the many examples of emphasizing the status of the professors is found in the report of the President's Committee on Education

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[11] Charles E. Smith, Dean of the University, Louisiana State University, Interview, January 27, 1959.

[12] Beardsley Ruml, and Sidney G. Tickton, Teaching Salaries Then and Now, (New York: The Fund for the Advancement of Education, 1955), p. 18.

Beyond the High School:

> A recent study found that from 1940 to 1956 real income (measured in buying power after taxes) increased 29 percent for lawyers, 64 percent for industrial workers, 96 percent for physicians, but only 12 percent for college teachers as a whole. The modest increase for college teachers was entirely in the lower ranks; full professors suffered a net decrease.[13]

In emphasizing and publicizing these weaknesses, higher education in many cases has inevitably complicated its own problem because it has also emphasized the weaknesses to its own employees.

The business officer can assist with this problem by doing everything within his power to help raise the salary level to acceptable standards. However, he can assist more directly by emphasizing to the employees of his institution the many benefits which it affords. Surveys have indicated that salaries are not first on the list of motivation for a person to take or to hold a job.

In a study on means to retain a faculty, Paul H. Davis wrote,

> Salaries are important, but industry found that salaries are far from being the top item in motivation. In fact industry rates salaries about seventh on the motivation list. Highest on their list are: recognition, appreciation and the satisfaction of achievement...therefore college administrators might well review for their faculties such items as travel funds for attending professional meetings and other benefits.[14]

Within his own offices the business officer must give recognition and appreciation for the efforts of the employees which he controls. In addition he must stress the benefits, both tangible and

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[13] Second Report to the President, President's Committee on Education Beyond the High School, July 1957 (Washington: Government Printing Office, 1957), p. 34.

[14] Paul H. Davis, "How Can We Keep and Enlarge the Faculty?" College and University Business, Vol. 20, No. 2, February 1956, p. 21.

intangible, which the institution offers to all of its employees.

Emphasizing fringe benefits

A business officer has many opportunities to emphasize the advantages and strong points of being employed by his institution. One example is the fringe benefits which can be stressed. Every business administrator is conscious of what the fringe benefits are costing, but many miss the opportunity of stressing these benefits to the employees. A study of fringe benefits by Donald E. Dickason indicated that, "The total cost in money per hour including non-productive time plus extra cash contributions is increased by 25% over the hourly figures of the payroll."[15]

Fringe benefits are divided generally into two groups - those that cost no extra money to the university, but subtract from production by the employee, and those that actually cost extra money. In the first group for most universities would be listed vacation, disability leave, legal holidays, rest periods, jury leave, witness leave, military service, leaves for deaths or funerals, outside services as consultant, and participation in educational programs. In the second group which costs extra money to the institution would be listed retirement plans, medical surgical and hospital contributions over paid disability leave, group life insurance, health, hospital and medical care insurance, extended disability payment (when duplicate payment must be made to another employee replacing the one disabled), meals and housing furnished to some groups such as food service and nursing services.

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[15]Donald E. Dickason, "What Are Fringe Benefits Costing You?" College and University Business, Vol. 13, No. 1, July 1952, p. 28.

Perhaps most important of all is full pay and sometimes full expenses, or at least part expenses, to attend professional meetings or take courses of instruction for the benefit of the employee.

Competition for personnel

It is believed that the teaching profession in higher education is on the threshold of the greatest rise in salaries in the history of education. This belief is based upon three major premises:

1. Professors' salaries have already lagged so far behind other professions that an adjustment is inevitable to retain the staffs.

2. The pressures of increased enrollment have been felt and publicized in secondary schools causing the public to become conscious of the difficulty. The impact of this increased enrollment has not yet reached the levels of higher education, thus the full implications of the demand for professors has not yet been fully felt.

3. There is no reservoir of trained professors to shift to areas of pressure and increased demand in the developing emergency - therefore the supply will be critically short to meet the demand. Stiff competition between universities is inevitable in order to retain their standing and faculties. Consequently, salaries will be pressured upward.

For the past several years industry has been a strong competitor for university professors, particularly those with the PhD. The President's Committee reported, "The graduate schools are currently awarding about 9,000 doctoral degrees annually. Into teaching go probably no more than 5,000 of these candidates, a considerable

proportion of whom are already engaged in teaching before receiving their doctorates."[16] In another part of their investigation the Committee further found that:

> To restore teaching to a competitive position in the professional labor market comparable to that which it occupied before World War II would require an average increase in faculty salaries of something like 75 to 80 percent. And to maintain this position, once restored, would probably require by 1970 an average rise of 100 to 125 percent above present faculty salary levels.[17]

These figures give an insight into the financial problem that confronts the management team in order to meet the competition of industry. However, it is believed that another complicating factor will become increasingly important - competition between universities. Although there has been some normal seeking of personnel between universities, it appears inevitable that this competition will increase. With the rise in enrollment and the resulting increased shortage of teachers as has been outlined, universities will begin to bid higher for new personnel.

The problem does not stop there. When a new professor is brought in at a higher salary, there is an automatic pressure developed among the present personnel to bring their salary at least equal to the new professor. This process multiplies itself as the shortage grows and competition becomes keener. Furthermore, as a professor is hired from one university a chain reaction takes place. University A hires from B, therefore B must hire from C, and so forth. But at each successive level of this hiring process there is a gradual and sometime drastic

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[16] Second Report to the President, op. cit., p. 28.

[17] Ibid., p. 6.

raising of salaries. The upward pressure of salaries is already being felt by many universities.

A specific case in point is illustrated by the actions of the University of Illinois. Other leading universities are following a similar course, or will be forced to do so to retain their relative positions.

> The most serious problem facing higher education in the next decade is recruiting enough personnel adequately to staff classes for twice the present enrolment. The University can ill afford to lose staff to other professions, and concerted efforts must be made to attract more people to the teaching profession. Many men and women are temperamentally attracted to the academic life, but to hold even these a generous increase in the salary level is essential.
>
> Adjustments in nonacademic salaries must be made to keep pace with anticipated increases in industry and in private and federal employment. In most nonacademic groups the salaries are now reasonably in line with comparable positions elsewhere, but further adjustments are needed in some areas.
>
> Altogether $4,000,000 is needed for salary adjustments in the first year of the biennium and an additional $4,000,000 the second year, a total of $12,000,000 for the biennium...It is not the final answer to the salary problem, but it will permit a continuation of orderly improvement.[18]

It also appears that competition and pressure of salaries will cause some lowering of quality of instruction. It is readily conceded that some universities will meet the increased salary demands by paying a few top professors more money. The increased costs may be absorbed by utilizing more graduate assistants and less qualified instructors. Although it is inevitable that this action will be taken by some universities, those that maintain a leading place must also maintain leading quality. This combination will require salary raises as indicated by the actions of the University of Illinois.

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[18] The State of the University, Some Points of Interest, 1958-59, (Urbana, Illinois: University of Illinois), p. 25.

Characteristics of the work force

Another aspect of the financial implications of the personnel problems lies in the nature of the teaching profession. In industry there is a tendency toward continuity of employment, that is, an employee does not think in terms of working a "fiscal year" as a professor works a "school year," although still having permanent employment. There is a tendency within universities for the deans to start with "hunting licenses" in January to fill their staff for the following September. Academic tenure protects the professor, but does not protect the university from these yearly changes. The work force of higher education is far more fluid than in industry.

This fluidity of the work force is not observed so much in secondary schools simply because there is a strong tendency to retain somewhat provincial lines, for a secondary school teacher will rarely move from one state to another or even from one city to another because of the offer of a better job. The competition between universities recognizes no such boundaries. For these reasons when the competition begins to increase between universities, a university will be faced with the alternatives of either increasing salaries or losing its better staff. Because of the feature of the year-to-year work period, this loss could take place so quickly and unexpectedly as to be devastating to any one department if that department was out of line in its salary scale.

Responsibility of the business officer

It is the responsibility of the business officer, in conjunction with the academic officer, to keep the university administration constantly abreast of the relative standing of their institution. In

In securing these figures for comparisons it is not sufficient to compare a general average of salary levels. The composite average of a university might be quite satisfactory. Nevertheless the institution could lose the entire staff of any given department if that department is not comparable in salary standards with other similar universities. As has been mentioned before, these figures of comparison must be interpreted with discretion because of the extreme difficulties in making comparisons of university data.

The complications of a fluid work force would probably be much greater except that fortunately, professors by nature apparently do not tend to shift jobs as rapidly and easily as industrial personnel. For this reason it becomes doubly important that the management team keep the staff reminded of the many benefits of the institution, in particular the fringe benefits that are enjoyed.

It is further recognized that the increased demand and the decreased supply will present some disciplinary problems. Because of the short supply, it may not be possible to order or to force teaching loads or demands that might be desirable and reasonable. However, these are considered to be academic problems and will not be dealt with here other than to mention that they will indirectly affect the financial problems of the business administrator.

III. Some Selected Controllable Problem Areas of Planning

Consideration is given here to a few selected, but highly critical specific problems which will face the university business administrator in the coming years. The ultimate decision on these matters is not his to make. However, he will be relied upon for advice. The implications

of these decisions and their effects will be directly his problem. For this reason the most salient features of these critical problems will be explored briefly. By no means are these selected items to be construed as all of the specific problems or even the greatest in some instances. Furthermore, only a brief insight, not an exhaustive approach, is given. However, they are believed to be the most universal problems of a large nature which will confront the business administrator in the coming years.

Radioactive materials and nuclear reactors

The advent of radioactive materials and nuclear energy will require more comprehensive study and understanding by the business officer. The Atomic Energy Commission lists research reactor applications for licenses on file or issued for twenty-eight universities in the United States.[19] Among them are the leading institutions of America. It is a clear indication of the trend of progressive universities.

A brief insight into some of the financial implications to the business officer can be found in the prices published by a leading manufacturer of nuclear reactors. A small five watt portable training and research reactor is priced at $100,000.[20] However, it is generally considered that the minimum installation for a university should be ten kilowatts. The Aerojet-General Nucleonics Company has priced such a reactor (the AGN 401) for $200,000. Other reactors range in price to $4,000,000 in this same price list.

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[19]Atomic Energy Commission, Facilities License Application Record (Washington: Atomic Energy Commission, November 3, 1958)

[20]The Aerojet-General Nucleonics Company, San Ramon, California, Price list, August 1957.

In addition to this equipment, there must be added the cost of a building - usually upwards of $50,000 and an operational budget of about $75,000 per year to start. No further exhaustive study of installation finances will be given because each individual case would be different. However, the above figures give some idea of the scope of the problem.

The Atomic Energy Commission will very liberally finance the installation of new reactors when properly approved:

> The Commission will make grants toward the cost of acquisition of equipment to be used in course work dealing with nuclear energy technology. Grants to be made to any single institution may not total more than $350,000...Certain other materials loaned to any single institution may not total more than $50,000.[21]

Therefore, the capital expenditures for equipment can be financed almost completely through the Atomic Energy Commission. The university must furnish the buildings, staff, and operational expenses.

To meet these changing demands of the times it is often necessary to seek new laws and legislation to cover the new circumstances. It is the responsibility of the business officer to keep his chief executive informed of these new needs. The president in turn should seek new legislation through the governing board to meet the new demands or changed requirements.

The Atomic Energy Commission has provided very rigid safety requirements for the control of radioactive materials.[22] Normal purchasing procedures must be certified by designated safety officers.

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[21]Atomic Energy Commission news release, September 5, 1956.

[22]The Federal Register, Vol. 22, No. 19, Washington, D.C., January 29, 1957, Title 10, Atomic Energy.

Deliveries can be made only to these designated officers. It is impossible to obtain materials unless these procedures are followed. All of these requirements present problems to the administration because they do not conform to the standard practices or regular procedures. New and special methods must be adopted for procuring and handling radioactive shipments.

Disposal of radioactive waste products is a major problem. Animals in particular and all other items upon which experiments are performed must be disposed of with great precaution. Normal means of disposal such as drains and sewers cannot be used. Burying of the products must be done in fenced areas with every precaution taken to guard against contamination of persons or animals in the area. Due to this difficulty, burying on a large scale is not feasible. In many instances it is necessary to return the waste products to the laboratories for disposal. Where it will serve the purpose, it is far simpler and more economical from a disposal standpoint to experiment on small animals rather than large ones.

Data processing systems

High speed computers and data processing centers will require special planning and study by university business officers. Their financial and organizational implications can be quite forceful. Can a university afford to go into the expensive field of computers? In answer, the president of a university replied, "That is not the question. A progressive university cannot afford to do otherwise."[23]

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[23]President Troy H. Middleton, Louisiana State University, Interview, April 1, 1959.

Furthermore, as has already been indicated, most universities have a mandate by law to seek and explore the fields of new knowledge.

A comprehensive survey of the subject was conducted by a commitee of Louisiana State University in 1957.[24] Some idea of the scope of growth of computers is seen in the fact that the committee found forty-four leading universities in America which either already had a computer center or had far-advanced plans towards such a center. The committee studied the problem of computers as related to universities by visiting nineteen various installations. These included ten mid-western and southern universities, and Harvard, Massachusetts Institute of Technology, University of Pennsylvania, and Franklin Institute. In addition, the committee also studied the Bureau of Standards in Washington, the International Business Machines and Remington Rand Service Centers. The results of this study give some insight into the problems which will be encountered in university business administration.

The committee found that there are three compelling reasons why universities must consider the field of computers:

1. Students must be trained at the university level and have some first-hand knowledge in the use of computers if they are adequately to be prepared to enter industry and professional fields. In particular, new techniques of managerial decision-making are being explored in the use of computers. Actual "games" are being used as a new instructional technique to learn to make management decisions.

2. In order to discharge properly the research functions of a university, computers are necessary for the solution and development of

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[24] Report of Computer Facilities Committee, Louisiana State University, May, 1957.

some research problems now impossible without a computer.

3. Prestige of the university demands that it keep abreast of developments with this new equipment. Difficulty in retaining existing staffs and securing new staffs has been experienced by universities without a center.

Experience has indicated that computer problems develop in a university by first installing a small or intermediate scale computer. The faculty and staff begin to adapt their thinking and programs in terms of the computer and what it can do. Many problems in the fields of research and science, which were previously unsolvable are opened. This expansion of ideas and use soon make the intermediate size computer unacceptable. Pressure and necessity develop to install a large computer. The university is then faced with the financial, staff, and space problems involved.

In very broad terms, the committee found that the cost of rental and operation of an intermediate computer (such as the International Business Machines 650) was from $50,000 to $100,000 per year. A large scale computer could cost from about $600,000 upwards with operating costs of $100,000 to $125,000 annually. These very brief figures are given only to provide some idea of the scope of the financial impact inherent in the installation of computer centers.

In planning the financial program, there are several alternatives available to the business administrator:

1. The university can engage in joint financing with a computer company whereby the company is allowed a percentage of time in the use of the machine. Southern Methodsit University is currently using this plan.

2. Contracts with government agencies can be arranged, whereby the agency has routine available time - or complete time in the event of an emergency. The University of North Carolina has such a contract with the Census Bureau and in addition has received assistance from the National Science Foundation.

3. Another alternative is the rental or purchase by the university through the medium of sale of time to industrial concerns or governmental agencies. The University of Michigan is presently using this method. Under such a system it is estimated that 30 per cent of the time must be contracted for in order to pay for the computer.

4. An association of colleges or other using agencies has been tried with success. Massachusetts Institute of Technology has installed a computer, but the activity is a joint participation of the New England Association of Colleges.

5. Direct grants from computer companies offer another possibility. Harvard and the University of Pennsylvania have received such grants. However, it must be noted that the probabilities of such a grant are exceedingly small.

Obsolescence is to be considered in planning for a computer center. However, the committee found that it was not of major operational importance. The computer will continue to perform operations for which it was designed for many years. The Harvard computer built in 1944 is still performing adequately.

Operational costs will be greatly affected by the new inventions of transitorized equipment. In particular this new type of equipment has greatly reduced the space required for a machine. Maintenance of the new equipment should be less expensive. For these reasons it

is possible that the allowable budgets and space might permit installation of transitorized equipment where equipment of comparable size was impossible before.

Only in unusual and emergency conditions is the business office to make use of the computer center. Normally, scientific or instructional uses will not be mingled with business use.

Adult education and extension activities

What is the responsibility of a university toward adult education beyond the traditional functions of resident teaching and research? This is a fundamental question of policy that has extremely far-reaching effects for the business officers of state institutions in particular. It is recognized that private institutions are usually not as concerned with extension type activities as are state universities. However, almost all educational institutions of higher learning are affected to some degree by the problem of adult education.

President Van Hise of the University of Wisconsin said, "Whether it (adult education) is the function of the University should be decided by the simple criterion as to whether the University is the best fitted instrument to do the work. If it is, it should do the work without reference to any person's preconceptions of the scope of a University."[25]

Like Louisiana, most state governments have given a virtual mandate to their universities to provide for off-campus adult education.

> Though the primary purpose of the university is to provide and maintain the highest type of instruction in the various important branches of knowledge for graduates of the high

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[25]Charles R. Van Hise, Proceedings of the First National University Extension Conference, Madison, Wisconsin, 1915, p. 9.

> school course of study, it shall also offer such opportunities for instruction as may be practicable to persons in the state who are not in residence on any of its campuses.[26]

The far-reaching activities of extension work are sometimes not realized because their students are not seen on the campus. The latest official survey of the subject was made by Dr. John R. Morton in 1951-52 through a grant from the Fund for Adult Education. The seventy-six National University Extension Association members had between 500,000 and 600,000 full-time students on their campuses. However, the members had over 50 million people who utilized one or more extension services. Over one and a half million people took part in organized and continuing instructional programs.[27]

To what extent should extension activities, particularly of the short-course type be self-supporting? It might be contended that this type of activity is specialized and benefits only one segment of the population while the balance of the taxpayers subsidize the activity. Practices vary widely between states as to the amount of subsidy which the state finances. However, based upon the apparent success of the program at Louisiana State University, it is believed that this type of activity can contribute greatly to its own support. In 1957-58 the University handled 32,929 registrants in its conferences, short courses, institutes and work shops.[28]

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[26] Louisiana Revised Statutes, Acts of 1940, No. 196, Article I, Par. 2.

[27] J. W. Brouillette, "University Extension," Peabody Journal of Education, Vol. 20, November, 1957, p. 138.

[28] Annual Report of the General Extension Division, Louisiana State University, 1957-58, p. 2.

Aside from the financial considerations as outlined, extension activities are of significance to the business officer through their effects upon public relations. The contacts effected are extensive throughout the state and region, and are generally among a widely dispersed population. For a publicly supported institution in particular, these contacts have a beneficial effect upon public relations. There can be little doubt that the effect is also registered in appropriations.

IV. Some Selected Uncontrollable Problem Areas of Planning

Some elements of planning are intangible and impossible to predict with any degree of accuracy. Nevertheless their presence is real and must be recognized and appraised. In some instances it may be necessary to set up "contingent planning." Such plans provide for circumstances which are uncertain, and yet give definite evidence that the circumstance might occur. A specific example of this type of contingent planning occurred in 1958-59 when the State of Louisiana informed its agencies that it might be necessary to withdraw 5 per cent of their allotted funds at a later date. Such a contingency was impossible to forecast, therefore a reserve had to be maintained to meet such an event. Many other contingencies cannot be forecast with even as much accuracy as in the cited instance. Nevertheless, it is well to recognize the possibilities, and to prepare for them to whatever degree is possible under the circumstances.

Trend toward junior colleges and branch universities

The place of junior colleges, four-year colleges, and university branches is under serious study by many states. The trend is

uncontrollable as far as the business administrator is concerned, but planning for its effects are the responsibility of management. It is important for the university administration to recognize and attempt to forecast the trend of this type of higher education within its own state, for the trend will have a material effect upon the planning for any individual institution.

Junior colleges are more widely distributed and are therefore located closer to the homes of the students. For this reason they tend to reduce the residence hall requirements of higher education. However, there is the offsetting disadvantage that they may increase the general classroom construction cost to the state as a whole. This added cost is created because the construction is more widely distributed. Junior colleges have a tendency toward higher administrative costs because of their decentralized positions. In addition, many educators contend that there will be a dilution of the quality of teaching when the general available faculty is spread into more schools. This latter point will not be elaborated upon as it is considered to be one of education rather than business administration.

On the other hand, it cannot be denied that junior colleges tend to bring the source of education closer to the people that it serves. The cost of education to the student is lowered in most cases because the student can live at home. Many students only intend to complete junior college and would not do so if one were not conveniently located nera their home.

Another closely allied trend is the tendency for junior colleges very soon to become full four-year colleges. After being established

for a few years, local pressures and normal growth soon cause the junior college to request and usually secure full four-year status.

The trend of centralization or decentralization of colleges within his own state is therefore important to the business officer. In the opinion of most of the administrators interviewed, the problem is completely indecisive and a definite trend is not yet evident. The implications to business management must be considered. It is believed by the writer that there will be a trend toward larger and more junior colleges. However, the trend will not be at such a rate as to decrease materially the growth of the large central universities. Therefore, the rise of junior colleges will tend only to decrease the severity, not remore the growth problems of the university.

The increasing interest in four-year branch universities is of perhaps more significance to the university business officer than the rise of junior colleges. The University of California at Los Angeles and Louisiana State University at New Orleans are examples of this type of growth. This type of educational structure may well be the organizational pattern of the future. The branch university located in some metropolitan center offers all the advantages of proximity to the students, while retaining the advantages of centralized university administration.

Some administrators have expressed the opinion that gradually the trend will be toward branch four-year colleges spread throughout the state and offering the basic and most popular curricula. The central university will be operated more for the graduate level of instruction and offer curricula somewhat more specialized. However, the opinion

was expressed that even for this type of organization, the central administration from the parent campus would be maintained. To the business administrator, this type of organization will mean a system of branch business offices, probably each controlled by a local business manager. Whether or not business functions such as purchasing will be retained by the parent university will be a matter for individual determination. However, it is certain that centralized accounting must be maintained - even though necessary records are kept at each branch.

It is clear from this brief discussion that the business officer must study and be familiar with these trends. He must plan for an effective development of business functions with the clear possibility that other sections of the university may be formed. In the event of such formation, then adequate planning is necessary to effect a smoothly controlled branch operation.

Political considerations.

Political considerations are particularly significant to public institutions because their source of funds is largely dependent upon governmental bodies. The situation can change quickly and unpredictably. The changes may be completely irrelevant to the needs of the institution. Appropriations can be influenced by even such factors as the standing of athletic teams. Lack of or improper planning for higher education by governmental bodies can have serious consequences for the colleges and universities, but consequences over which they have little control.

Competition for funds between state colleges and universities can become a critical consideration with many political aspects. Sometimes

elaborate campaigns for funds may be conducted at political levels. This subject will be explored more fully later in this study. At this point it is mentioned only to point out the political considerations which can affect the university.

Many state colleges and universities are subject to civil service regulations in the employment of personnel. These regulations have a direct effect upon personnel policies. In particular, pay scales, holiday schedules, hours of work, vacation policies, and conditions of employment are affected. These circumstances have a direct effect upon the university, but in many ways present uncontrollable considerations for planning purposes. The primary effect of such regulations upon business administration is to remove some of the powers of employment which might normally be the responsibility and prerogative of management.

The growth of state administrative controls has caused great concern among college officials and many educators fear that controls developed in other states will be imitated in their own state governments. Our nation adheres generally to the belief that higher education should be free from political interference. Nevertheless in a number of states fiscal and management controls have been imposed that have tended to undermine the authority of institutional governing boards. Not all of these fears are warranted and events have not always borne out the apprehensions of college officials, but there have been enough instances of states cutting into university administrative controls that the fears are not without real foundation.[29]

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[29] The Efficiency of Freedom, Report of the Committee on Government and Higher Education, (Baltimore: The Johns Hopkins Press, 1959), p. 9.

A very closely related political aspect to university business administration has been the increasing tendency toward centralization of administration in state governments. A study of the relationship of the state and universities by Moos and Rourke noted this tendency and cautioned against its possible implications.

> Everywhere in state government there has been a gradual movement toward administrative centralization, and this move, coupled with the growth of state appropriations, has brought a burgeoning variety of controls over state colleges and universities...Inspired as it is by the entirely praiseworthy goals of economy and efficiency, the new centralization has nevertheless seemed to many educators to pose a grave threat to the traditional freedom of state colleges and universities and to open up avenues of political pressure on the campus.[30]

A business administrator must therefore attempt to keep himself informed of political developments. Normally this is done through the public relations officer of an institution who should stay in close contact with legislative and political developments. However, any source of contacts and information should be utilized in order to keep abreast of developments in the field of politics which will have a bearing upon the institution.

Trade union activity

Another unpredictable but forceful element may be the advent of unionism to a larger scale into campus activities. This picture is also indecisive, particularly in the South. There have been some union organizing activities particularly in colleges located near industrial centers, but to date there have been no concerted efforts on a broad

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[30]Malcolm Moos, and Francis E. Rourke, The Campus and the State, (Baltimore: The Johns Hopkins Press, 1959), p. 44.

scale by unions to take universities into their organizations. "The relation between higher education and organized labor is still in flux. The methods and materials are varied and changing."[31] About the only evidence of union activity in the South has been in connection with contractors who became involved in labor disputes while working on university construction projects.

Experiences of industry bear ample proof of the difficulties that can be caused should labor forces become unionized within the universities. The business officer can somewhat protect the institution by carefully watching the labor practices of his organization. It is well recognized that disgruntled labor groups are the prime targets for union activity. On the other hand, as a practical consideration, it is impossible to accede to all of the wishes and demands of the labor group. For this reason the handling of labor problems must be done with understanding and persuasiveness.

V. Selection of Strategic Factors

From this brief insight into some of the considerations of planning, it becomes evident that the management team of the university can hardly forecast in detail, or even attempt to make such a forecast, of every aspect of the future that might affect the university. It is evident that the administration is confronted with numerous alternatives and considerations toward the solution of its problems. The management must appraise these many facets of the problems and determine the direction

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[31] M. Starr, "Higher Education and Organized Labor," Current History, Vol. 15, September, 1955, p. 172.

of its planning. It is this proper selection of factors that lies at the base of good planning. Management must determine what are the most important items upon which it should devote its time. Much waste of time and effort in fruitless detail and irrelevant matters will result unless the administrators are able to select the factors that are the most important to the institution. One consideration that is often overlooked is the strong and the weak points of the key administrators who are to put the plan into effect. Their characteristics will materially affect the planning for the institution and particularly the outcome of those plans.

It is therefore necessary to select the strategic elements of the future and to concentrate on these points. Koontz and O'Donnell have given emphasis to this importance of strategic factors. They point out that in any scientific analysis of problems that it is economical of time and effort to select and work only with strategic factors. By so doing time is spent on only those elements in a problem which make the most difference in its solution.[32]

Here lies the critical test for the management team - the ability to select those things which are important, and the ability to put "first things first." Experience, training, and inherent ability are necessary requisites to enable the administrator to meet this test. He can, and must, be guided by the principles as outlined, but the decision is his to make after the analysis is made. An effective administrator cannot delegate a decision which it is his responsibility

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[32]Koontz and O'Donnell, op. cit., p. 457.

to make and which it is his responsibility to see that it is executed.

VI. Summary

It is believed that there is a universality of the principles of business management which applies equally to universities as to all businesses. Planning, generally accepted as the first function of management, is of utmost importance to a university. It has as its first principle the recognition of the problem. Planning must be coupled with control. Plans must be constantly evaluated and kept in proper balance. For maximum effectiveness of personnel, participation in planning is necessary at all levels of the organization. Policies of planning must be passed from the highest level of authority successively to each other level. And finally it is the responsibility of the management team to be able to select the strategic factors from these planning operations and guide the activities of the institution accordingly.

CHAPTER III

ORGANIZATION

I. Some General Considerations of University Organization Structure

The organization structure is a mechanism designed to effectively mobilize and direct the forces of an enterprise. Nevertheless universities have tended to be negligent in this important phase of management. It appears that university structures have grown somewhat more through expediency than through design. Although it tends to lead to inefficiency, many institutions have been slow to improve the condition. Dr. Harold W. Stoke expressed the same concern at these deficiencies when he said, "For many reasons colleges are not distinguished for clarity and efficiency of organization. Yet the importance of good organization can hardly be overestimated. It reduces frustration, conserves time and energy."[1]

Possibly a contributing factor to the growth of indistinctness of structure has been that university administrators have been predominantly trained as educators. An academic background with its concepts of academic freedom is not particularly conducive to establishment of a military type rigid organization structure. The use of terms such as "chain of command" are not particularly accepted in educational circles. However, an enterprise must have organization, and perhaps educational

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[1] Harold W. Stoke, The American College President, (New York: Harper & Brothers, 1959), p. 39.

institutions have favored the academic environment to the detriment of efficiency. "The administrator in higher education has characteristics that set him apart from the typical manager in industry. The duties of college operations tend toward creativeness and research, rather than production. This encourages individualistic tendencies that are conducive to a rather loose organization."[2] With the increasing pressures of administration, it is believed that more attention must be given to organization structure in order to improve efficiency.

The importance of the individual in the organization structure

The framework of an enterprise entails far more than just the graphic presentation of a chart which marshals and directs the forces. The structure represents people, their duties, authorities, responsibilities and relationships. An often overlooked factor is that it also represents the aims of these people and the place which they occupy in their economic society. People are very often referred to in relation to the job which they occupy. In a sense their place in an organization is almost their status in life.

The importance of titles and positions is often overlooked by top management. Nevertheless there are innumerable examples of the pride and respect with which people hold their positions at the so-called "lower rungs of the ladder." Workmen even like to be identified with a project or janitors with a certain building. It is their identification in society in some respects and many take pride in this fact. This intangible esprit de corps is sometimes one of the most powerful moving

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[2]Paul K. Nance, "Concepts in College Organization," College and University Business, Vol. 26, No. 4, April, 1959, p. 30.

forces in the organization.

Too often institutions are guilty of professing to recognize the individual, but not doing so in practice. Chester I. Barnard recognized this fallacy and cautioned against it:

> We still give much lip service to the forgotten individual, but the whole complex of thought, except when our immediate personal concerns are involved, relates to the cooperative and social aspects of life. We are so engrossed constantly with the problems of organization that we neglect the unit of organization and are quite unaware of our neglect. [3]

Universities are no exception to this charge - either on the academic or on the business side of the organization. For these reasons university management should give careful thought and attention to the framework of the enterprise and the individual's place in that framework. Relationships of position and authority exist at every level of the organization. The university administration must take advantage of this opportunity to secure the utmost production from every person. If the person fits well into the structure, if he understands his place, and if his duties are well defined, he is more likely to be proud and happy in this relationship. The individual's effectiveness is greatly enhanced under these desirable conditions.

The report of the special committee on education of the Rockefeller Brothers Fund was particularly emphatic in its observations as to the importance of the place of the individual in an organization:

> The danger is that we may forget the individual behind a facade of huge and impersonal institutions. The risk is that we will glorify science and forget the scientists; magnify government and ignore the men and women who discharge its

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[3] Chester I. Barnard, Organization and Management, (Cambridge, Mass., Harvard University Press, 1952), p. 4.

> functions; pin our hopes on education, business or cultural institutions, and lose sight of the fact that these institutions are no more creative or purposeful than the individuals who endow them with creativity and purpose.[4]

Some principles of effective organization

The American Management Association conducted a survey in 1952 which listed nine criteria as the most frequently used principles of organization. The term, "principles," as used in the discussion, refers to the criteria which the organization is designed to meet: effectiveness, efficiency, division of work, functional definition with authority and responsibility, the chain of command, channels of contact, balance, control, and perpetuation.[5] The report points out that these principles of organization must be applied with common sense based upon experience. Again illustrating the universality of the application of the principles of management, Henri Fayol lists almost exactly these same criteria among his fourteen basic principles of management.[6]

The university business administrator must likewise apply the principles with common sense and adapt them to the purposes of his organization. In the first place, he must recognize that there tends to be a natural resistance to change - a strong tendency among people to retain the "status quo." Change, particularly sudden and violent change, creates a sense of insecurity and uneasiness among employees.

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[4]"The Pursuit of Excellence," Education and the Future of America, Special Studies Project, Report V, Rockefeller Brothers Fund, (Garden City, N.Y., Doubleday & Co., 1958), p. ix.

[5]Ernest Dale, Planning and Developing the Company Organization Structure, Research Report No. 20, (New York: American Management Association, 1952), p. 196

[6]Henri Fayol, Administration Industrielle et Generale, translation by Constance Storrs, (London: Sir Isaac Pitman & Sons, Ltd., 1949), p. 19.

Many changes which were basically sound and desirable have been unsuccessful because of the manner in which they were instituted. In the final analysis it will be the effectiveness with which the units of the organization (the people) accept any proposed change which will to a large degree determine its success.

Therefore, when organizational changes are decided upon, it will be wise leadership that will take the time to explain to those who are affected the reasons for the changes. As was pointed out in Chapter II, participation is a very vital element in the acceptance of a plan. All too frequently, the explanations are given only to top officials who are affected, and the information never reaches other members of the organization. Communication at all levels is necessary as will be brought out later. This idea does not imply that a complete and exhaustive report of all reasoning for changes must be given all levels of the structure. Instead the concept implies conveying to each person the information which directly affects him and the pertinent reasons for what is being done and briefly why it is being done. By conveying such information, all persons consider themselves to be a part of the plan. It also serves to prevent or minimize many incorrect and harmful rumors.

Criteria of effectiveness and efficiency. The effectiveness of the organization structure of a commercial concern can to some degree be measured by using the simple gauge of profit. The end results of a university are considerably more intangible and difficult to measure, but the accomplishment of its objectives are no less important because of this difficulty of measurement. Actually, the effectiveness is measured by the degree of accomplishment of the objectives of the enterprise. It is the responsibility of the business officer to improve the

degree of effectiveness of the business functions within his university.

Efficiency, like effectiveness, is also a very difficult criteria to measure. In essence, it is a measure of the effort and resources utilized to accomplish the objectives of the organization in relation to the degree of effectiveness it has obtained. Effective organization is one of the first steps toward this efficient marshalling of resources and effort. Efficiency is the reduction of lost time, efforts, and materials. Its application must be a constant one of watchfulness because the conditions which cause inefficiency are never static. In this sense the organization is like a machine - the fact that it is working efficiently today is no assurance that it will do so tomorrow. Parts of the machine may break down or wear and begin to produce an unsatisfactory product. Only watchfulness and constant vigilance can prevent harmful effects by such undetected inefficiency. Furthermore, like mechanical failures, these conditions usually do not tend to correct themselves. Once inefficiency starts in a given direction it usually will continue to grow worse unless the watchful eye of a superior detects and corrects the condition. The point is that an organization structure when established is not static, but is a dynamic affair and must be held in control the same as any other operation.

Criteria of division of work and delegation of authority and responsibility. Division of work coupled with the delegation of authority and responsibility is the means by which executives can multiply their effectiveness. An executive's true productivity is not measured by how much work he can do as an individual. Instead it is measured by how much he can accomplish through others. One individual by human

physical and mental limitations can do only just so much work. However, if that individual can direct the efforts of others through the effective division of work, his effectiveness as an executive is greatly increased.

"Some find it difficult to delegate work. They may be cautious, unwilling to accept the work of others, or perfectionists who cannot see a job done less well than they themselves can do it."[7] Every business officer has observed those individuals who try to do everything themselves, thus actually decreasing their own efficiency. These individuals usually are extremely conscientious and have the conviction that the job cannot be done right unless it is done by themselves. However, this conscientiousness does not alleviate the fact that the net effect is to destroy not only their own usefulness, but also the effectiveness of others in the organization. The business officer must apply the same observations to himself. More consideration will be given to this subject in the later chapter on leadership.

David D. Henry, now President of the University of Illinois, warned business officers against this deficiency in themselves. "The business officer who does not share his responsibilities with a competent staff, who arrogates to himself all final decisions, who insists that he alone through his signature or spoken word must pass upon every action of his department is inviting trouble."[8]

One very effective president of a university told the writer that

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[7]Stoke, op. cit., p. 38.

[8]David D. Henry, "The Business Officer's Role in Top Management," College and University Business, Vol. 14, No. 1, September, 1951, p. 19.

he had been president for nineteen years without an ulcer. He went ahead to explain that he followed the simple expedient of picking the very best men he could find and then letting them run their jobs. He laughingly said that he let them do his worrying for him. In further interviews with these officers they agreed that this practice was in effect, and they felt the full responsibility and authority of their jobs. This university president is an example of effective division of work and delegation of authority - prime requisites in an effective university organization.

The division of work is also intended to delegate functions into similar type channels of operations. By such channelling more specialization is possible. "The primary step in organization is to determine and to establish as separate entities, the smallest number of dissimilar functions into which the work of an institution may be divided."[9] Following this same concept, Henry Ford is reported to have said, "No job is too difficult if you break it into small enough parts." Therefore, throughout the formulation of the structure, similar functions should be grouped together.

Criteria of the chain of command and channels of contact. The chain of command and the channels of contact are closely related in the organization structure. The chain of command gives the structure its lines of authority for action while the channels of contact give the lines of communication. The lines of authority in particular must be very clearly drawn. An individual normally cannot be governed by more

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[9]H. A. Hopf, Organization, Executive Capacity and Progress, (Ossining, N. Y., Hopf Institute of Management, Inc., 1945), p. 4.

than one superior, otherwise conflicts of instructions are inevitable. On the other hand, too rigid compliance with these exact channels can materially decrease the speed of accomplishment when swift action is necessary.

There seems to be a tendency within universities not to adhere to the lines of the chain of command and channels of contact, but rather to have more overlapping of duties and in many cases duties that are not clearly defined. This tendency is perhaps best illustrated by James B. Conant, former President of Harvard, when he was asked who ran the University. Conant replied that the question could not be answered. He said that if one seeks an organizational chart showing the administrative structure of the university, there is no such plan. If one talks about who reports to whom, the vocabulary is out of place in Cambridge.[10]

The tendency towards an indecisive structure sometimes leaves the officers and personnel with potential areas of conflict. More credit probably is due to the individuals than to the organization structure if conflicts do not develop. In discussing the organization structure, one dean said that he was often very uncertain as to the authoritative routing of certain communications. As a result he often sent communications through more channels than were necessary. But more seriously, sometimes the proper channels were not used. A more definitive organization structure, and adherence to it, probably would correct these difficulties.

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[10] Paul F. Douglass, Six Upon the World, (Boston: Little, Brown & Co., 1954), Chapter VI, p. 393.

It is surprising how conscious most people are of their exact position within an organization. This basic concept was mentioned earlier. No matter what position they hold in the line of authority, they generally like for that position to be distinct and well-defined. It seems to give them a sense of belonging to the organization and establishing their place in it. Many times a change in title or description of a position is more rewarding to an employee than monetary adjustments. It can be used to give recognition and improve the self-esteem of employees.

The reverse can also be true. Actual cases were observed concerning a survey and reclassification of university employees where only the job titles were changed. The employees suffered no monetary loss, and the change in classification was purely a mechanical one. However, several years after this reclassification there was still resentment among some employees at the change in their titles. Therefore, close attention should be given to descriptive titles of positions, it has much to do with morale.

> The plan of organization should permit and require the exercise of common sense and good judgment, at all levels, in determining the best channels of contact to expedite the work. These channels of contact are not described or limited by the lines of responsibility and authority of the organization structure as shown on the organization chart.[11]

This concept as outlined above of direct and expeditious communications is necessary at times for emergency actions or highly specialized instructions. However, it must be emphasized that unless these contacts are done with common sense and good judgment, the entire usefulness of

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[11]Dale, op. cit., p. 201.

the organization structure and the exercise of authority can be completely destroyed. If the business administrator of a university or any higher administrative officer consistently gives instructions or orders direct to the individuals who are to execute the orders, rather than using established lines of authority, the levels of authority soon are destroyed.

Channels of contact are also important as a means of gathering information. Decisions must have their foundation in facts which in turn are gathered through communications. Accurate and impartial information is difficult to gather because of the constant tendency to "shade" the information with those points that the bearer desires to stress, or that he believes the superior wants to receive. The "grapevine" has become recognized as an important informal chain of communication within organizations. However, in using these sources of contacts for information the administrator has the problem of separating facts from rumors. Nevertheless these sources are important and do serve as a media of informational channels.

Criteria of balance and control. The concept of balance and control within a university applies not only to keeping the various divisions of the structure in balance, but it also applies to keeping the degree of centralization in balance. Major decisions must be made at the higher levels and minor decisions at lower levels of authority. One must not usurp the powers of the other. In practical application these concepts become more a matter of application than of structure. For example, the business officer to a great degree has control of the budget after it is approved by higher authority. In application it

would be possible for the business officer to give more weight to one section of the university than to another. Or more seriously, he may put the balance of budgetary stress upon his own area of operations.

The academic and business functions of a university are not unlike the weights of a governor on a powerful productive machine. So long as each weight is in balance, the machine is in control and runs smoothly to accomplish its purpose. When either side is not in balance friction results, concerted action is impossible, the plant is not in control, and sometimes even disintegrates. Only wise and astute leadership of both segments working in harmony can accomplish the desired results. Business management on its side must make certain that it remains in balance. Direction and balance are more easily attained if they are governed by a properly balanced and decisive organization structure.

Balance means that there is a fair distribution of power between departments and officers. Again it is a matter of application. An organization chart can indicate a perfect balance of control. However, through its application all power and decisions can actually remain with the central authority. Just as in the concept of delegated authority and responsibility, too much centralization can result in inefficiency and ineffectiveness. On the other hand, too much decentralization can lead to lack of direction and control. Therefore it is important that balance be maintained not just in the formal structure, but in its application as well.

Like the considerations of balance, it is the application of control that determines its effectiveness or destructiveness. It is

a valuable tool which, when properly exercised, gives the university administration command over its operations. If improperly applied it can encroach on the organization framework and almost make the structure useless. Control will be discussed at this point only in terms of planning the organization structure - not in terms of operation (this phase will be covered more fully in Chapter V.) However, in drawing the organization structure, it is important that similar components are grouped together in order to give some comparisons of control. Actually, the basic principles already cited of division of work and chain of command tend automatically to provide the framework for the criteria of control. If this framework is properly formed, control can be exercised with uniformity and with a minimum of difficulties.

Criteria of perpetuation. In all interviews, discussions, and study on the subject of organization of a university, the principle of perpetuation had received the least attention by university administration leaders. No evidence was found that even one university had any organized or concerted plan of training for management within the organization. In every case that the question was raised it was found that it was expected that a person would automatically qualify himself for the next higher position through association with the institution.

It is a fallacy to believe that a person will become qualified for other positions merely by performing one job in the institution. Koontz and O'Donnell also disagree with training only by association. They term this type of training "simple exposure."

> The protagonists of this method (association) assume that such candidates will develop a facility for locating basic

> issues, that they will discover the managerial skills and cultivate them, and that their superiors will be able to recognize and promote subordinates who have developed these facilities. The simultaneous realization of all these conditions would be a major miracle.[12]

Industry on the other hand has long recognized this principle of organization and many plans of perpetuation and training are in effect.

> One of the most important responsibilities of top management is the successful perpetuation of the Corporation through making available qualified personnel for future management needs. These needs must be filled by executives with a breadth of experience gained from a variety of management responsibilities as well as depth of training in a specialized management area.[13]

Some of the most commonly used plans in industry are rotation of personnel, formal training through classwork, instruction by outsiders, company officers, and superiors, through coaching of subordinate by superior and many other methods. "The plan of organization should provide a 'ladder' of positions of increasing scope of responsibility, authority, and accountability so related to each other that at all times there are replacements in training for each higher position."[14]

The American Management Association conducted interviews with 530 companies with 250 or more employees to determine the status of plans of management training. "Of the firms interviewed directly, 48 per cent had plans. The reported activities varied in age from six months to over ten years, but the modal group was between two and three years."[15]

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[12]Harold Koontz, and Cyril O'Donnell, Principles of Management (New York: McGraw-Hill Book Co., Inc., 1955), p. 362.

[13]Jones & Laughlin Steel Corporation, Organization Manual, (Pittsburgh, Penn., June, 1950), p. 7.

[14]Ibid., p. 7.

[15]Koontz and O'Donnell, op. cit., p. 363.

It is indeed strangely ironical that while a university is engaged in the basic activity of training and education, it does not apply this concept within its own organization. It is recognized and conceded that the plan of rotation could not apply to a university as it does in industry. On the other hand, many of the other plans of training could apply. The simple process of temporary substitution in jobs can be very effective on a limited scale. To occupy a position even temporarily, a person will experience some of the problems and difficulties of the job. This experience better qualifies the person to fill the job when the need arises. However, it is more advantageous to do this substitution at the option of management, rather than wait for the emergency. When such substitution is done during a slack season, the superior can take time to direct and train the junior employee with very little disruption of the flow of work.

Such a training plan is also effective in the event of temporary absences of the superior. If the junior has been so trained by actual job performance he is in a much better position to take over in emergencies. The relationship need not apply merely to junior - senior type jobs. Jobs at the same levels can also be interchangeable. A much greater appreciation of the interrelationship of activities is gained by all parties to such training.

A double advantage is also gained by substitution. In the first place, the superior is compelled to review his own methods and practices, and often discovers improvements. The junior often asks piercing questions that lead to improvements. In the second place, it provides an opportunity to test the subordinate and gives some basis for opinion as to his capabilities of discharging the higher job should the occasion

warrant. As was pointed out in the section on planning - it is far better to plan in advance than to wait until circumstances force hasty decisions. Illness and death of employees usually occur quite unexpectedly. Unless trained substitutes can take over immediately, the management suffers because of this lack of preparation. Wise leadership in management will prepare itself for these possibilities by advance training of employees. The relative merits of the various training plans will not be discussed, the important point is not so much what plan is in effect as it is that a plan of training is in effect.

It might also be pointed out that certain disadvantages arise in substitution and training programs. Unless strategic times are picked for such interchange or training, confusion can result. Sometimes the personnel themselves do not like to change or to assist in training. However, industry as a whole has found such training beneficial in its management programs - it is believed to be equally applicable to a university.

II. Some Specific Considerations of University Organization Structure

The basic considerations and criteria for an ideal organization have been set forth. It is necessary to interpret these considerations into the actual organization of a university. Many of the suggested positions may be impractical in any specific organization. However, the functions are necessary. Whether the functions are performed by one or more persons is a matter for individual determination for each institution. An organization chart is helpful in this regard and provides a graphic presentation of the relationships which the institution

should maintain. Closely allied to the organization chart is an organization manual which actually defines the jobs and their functions.

A proposed university organization chart is offered as an illustration of some of the principles of organization which this study has set forth (Chart VII). In general, it is believed to be a satisfactory and workable framework. However, in some instances it may be necessary to combine some of the positions due to smaller operations. The relationships of the organization are clearly indicated so that the lines of authority are clearly drawn. It is desired to emphasize, however, that the writer does not imply that this proposed structure is the only type that is workable. An organization structure must be adapted to any local problems and conditions. Titles and terminology must also fit the local situation.

In considering the proposed organization some operational aspects are introduced briefly. However, they are only introduced to emphasize the pertinent considerations in relation to the organizational question under study. A more complete exploration of operational aspects will be given in a later chapter.

In particular, attention is invited to the definite, but moderately narrow, span of control. The duties and problems of each of these individuals are so complex and varied that it is believed that five or six persons is a maximum desirable number to report to a superior.[16]

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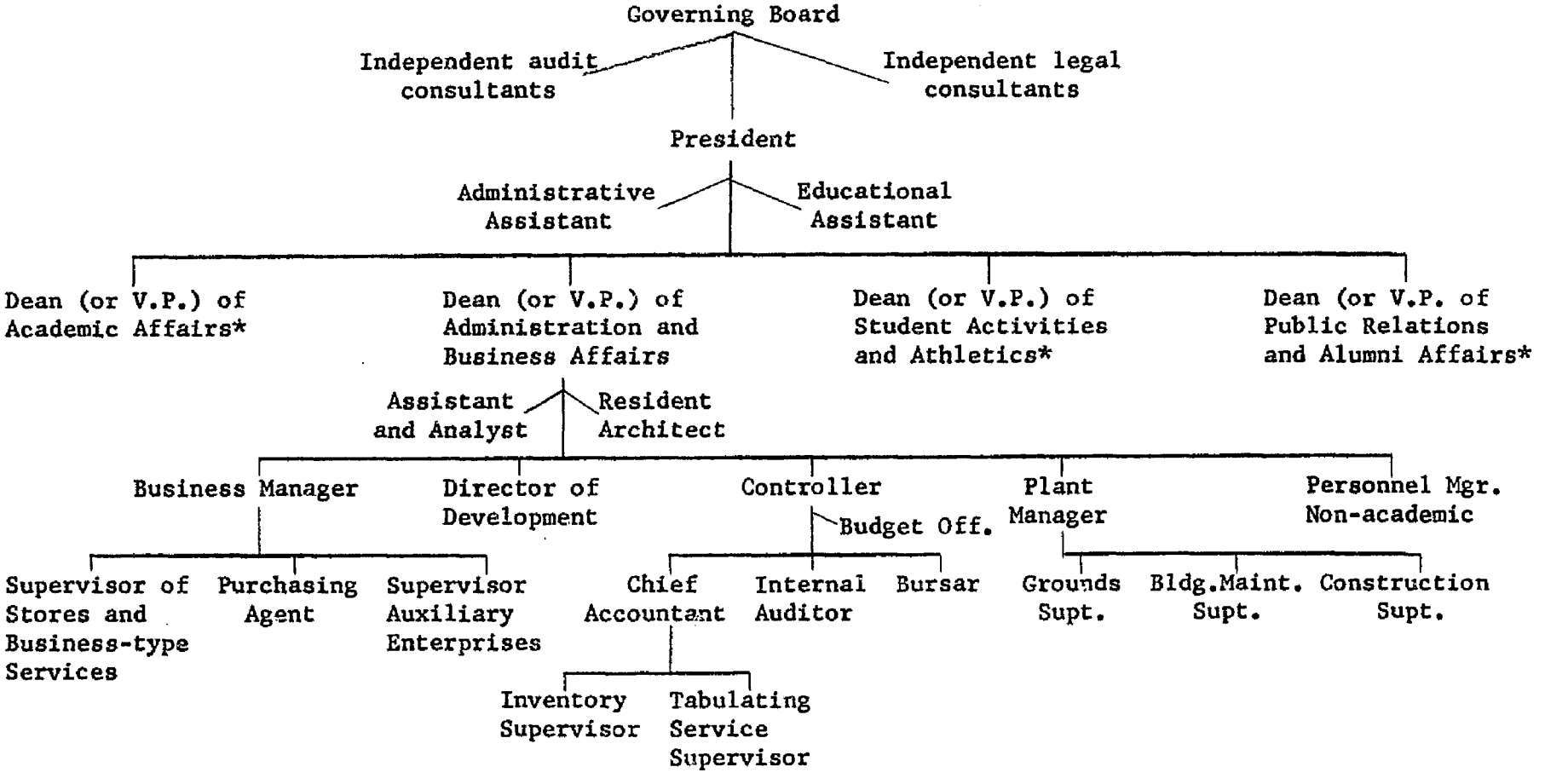
[16]It should be mentioned that it is not visualized that all ranks at the same organization level will receive the same pay. There are many considerations other than technical rank in the organization which must determine salary status.

CHART VII

PROPOSED UNIVERSITY ORGANIZATION CHART



*For purposes of this chart, not shown below the level of Dean.

The activities of the organization structure have been divided into four broad areas. Since this study deals primarily with business aspects of administration, no development will be given to any other than the business part of the organization. In a study of the administrative organizations of higher education, John Dale Russell found: "A rather definite organizational pattern has emerged, by which four major areas of administrative function are recognized...The four areas are the academic program, student personnel services, business and financial management, and public relations."[17]

The major objectives of the suggested organization are:

1. Primarily to free the president and secondarily to free each of the four major administrative officers from all routine duties and routine decision-making. This freedom will allow more concentration on exceptional and broad problems.

2. To have every major function of the university represented by a vice-president with only exceptional problems and policy handled by the president and the governing board.

3. To group the activities of the university into an organizational framework that gives specialization and familiarity with problems which can be utilized in decision-making at all levels.

The Governing Board

The top governing and policy bodies of a university will be given little attention here because their composition and actions are beyond

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[17] John Dale Russell, "Changing Patterns of Administrative Organization in Higher Education," Annals of American Academy of Political and Social Sciences, Vol. 301, September, 1955, p. 26.

the powers of the business management. However, since the duties and responsibilities of management must work so closely with them, their place will be discussed briefly. This body in most institutions is the equivalent of a corporation board of directors. They are known variously as board of trustees, overseers, regents, supervisors, and others. In this study they will be referred to simply as the governing board.

The universal management principle of coupled responsibility and authority applies to a university as vitally as to any effective organization. "Responsibility is a corollary of authority, it is its natural consequence and essential counterpart, and wheresoever authority is exercised responsibility arises."[18] In a university the board must pass the authority to the president, and he in turn must pass it to each lower level in accordance with the scalar chain of the organization. The weaknesses and failures of holding a person responsible without giving him authority are well known. Nevertheless, this situation is sometimes observed in university organization structures.

What then is the relationship of the governing board to the administration of the university? This relationship is effectively described by Dr. Harry L. Wells, who was himself both a Vice-President and Business Manager and a Trustee of Northwestern University.

> First in this line of responsibility must be a clear-cut concept of the function of the board in relation to administration. Under our definition of trustee the trustees must first of all choose an administration in which they have confidence, then lay down broad policies under which the administration is to function. The moment the board undertakes to assume the responsibility for the operation of the institution, that moment the institution's life will be dwarfed. It is

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[18] Fayol, op. cit., p. 21.

> impossible for men who are not paid for the job, and who have responsibilities in their own businesses which tax their time and energy, to be also in a position to operate institutions which happen to fall under a charitable trust.[19]

When a board assumes the responsibility and authority for minute operations of the university, it loses its broad purpose and main usefulness. However, in addition to destroying its own usefulness, it may largely destroy the usefulness and initiative of the administration by not delegating to it sufficient authority for effective operation. This principle is emphasized so strongly because its implications apply at every level of the organization. The same lack of delegation of authority can be observed between a supervisor and a foreman as well as between a board and a president. It is destructive to the effectiveness of the organization when it occurs at any level. More discussion will be given to this point under the chapter on leadership.

The first responsibility of the board is to appoint capable and efficient officials. Second, it has the responsibility to evaluate and weigh the efficiency of those officials. Normally, this function is performed through observation and through records.

It is at this point that the business officer plays such a vital role. Not only is it his duty to assist in executing the programs, but he must keep the board informed (usually through the president) and keep them advised with adequate records as to the state of affairs for which the board is responsible.

During an interview with the writer one vice-president and business

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[19] Harry L. Wells, Higher Education Is Serious Business, (New York: Harper & Brothers, 1953), p. 16.

officer was called by phone three times by two different members of the board of trustees of his institution. No conclusions are drawn from this observation, and it is dismissed as probably a coincidence. Nevertheless, such direct contact has the definite possibility of by-passing the lines of authority and creating some embarrassing situations even if not actually destructive to effectiveness.

Normally a board studies problems through the committee system. By use of committees it is possible for members to concentrate on and better familiarize themselves with a smaller section of the problems. Fortunately the outstanding abilities and broad experience of most board members usually overcomes the weaknesses of their detached position.

The President

The president of a university has a wide variety of duties sometimes scarcely related to the direct running of the organization. Much time is devoted to public relations activities. For this reason, it is recommended that the span of control be limited to about four vice-presidents or deans reporting to the president. These four vice-presidents represent every function of the university and in effect they become executive assistants to the president. These major officers form a cabinet or administrative council which should meet at regular intervals to discuss problems of the institution. Balance of interests and problems is thus obtained by having such a complete type of council to represent all functions. The research of the American Council on Education has suggested an even smaller number of officers reporting to the president:

> The number of administrative officers reporting directly to the president should be as few as possible...Even in the largest institutions it will be found that, by careful analysis of functions, it is possible to reduce the number of executive officers reporting directly to the president to two or three; for example, the chief educational officer or dean of faculties, the chief business officer, and, in some institutions, the director of public relations.[20]

Further discussion or development of the topic will not be made here because this aspect of the problem is beyond the powers of the business administrator.

Vice-President (or Dean) of Administration and Business Affairs

The position of the chief business administrator is visualized as one of a coordinator as well as executive. His is the responsibility to foresee business problems and bring them to the attention of higher authorities. At the same time he has the responsibility of accepting directions from these higher authorities and executing their policies. In a study concerning the chief business administrator his status is well described by the American Council on Education:

> The concept of a college administrator today places increased emphasis on his coordinating functions. Administrators are today appraised not so much as service functionaries either for the faculty or for the trustees, not so much as neat and tidy administrators, certainly not as autocrats within academic empires, but more as stimulators and leaders.[21]

There are basically two forms of organization affecting the duties of the chief business officer - the unitary type and the multiple or

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[20] College and University Business Administration, (Washington: American Council on Education, 1952), Vol. I, p. 5.

[21] Higher Education in a Decade of Decision, A Report prepared by the Educational Policies Commission (Washington: National Education Association and the American Association of School Administrators, 1957), p. 142.

dual type. In a unitary type organization the chief administrative officer reports to the president and performs only assisting functions for the board. In a multiple type university organization the chief business officer reports direct to the board. However, this latter type of divided authority tends to weaken the administrative structure simply because the president as chief executive would have no direct control over that major branch of operations. This situation is believed to be unrealistic and undesirable.

The problem of unitary or multiple control was studied by a Committee on Revision of Standards of the Commission on Institutions of Higher Education of the North Central Association of Colleges and Secondary Schools. The committee surveyed thirty-nine institutions having unit type organizations and eighteen having multiple type. Their findings indicated that:

> The judgment of these investigators, based on this experience, was that the dual and the multiple plans of organization have inherent possibilities of conflict and friction that are almost certain sooner or later to result in difficulty. Where such a plan seems to be working smoothly for the present, it is nearly always found to be because of exceptionally fine adjustments of the personalities involved rather than because of any fundamental soundness in the plan of administrative organization.[22]

The governing board should entrust the responsibility for management to the administration with the accompanying authority to do the task. The chief administrative officer should report to the president. Any independent reports which the board might feel are necessary could be accomplished through independent audit facilities.

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[22]John Dale Russell and Floyd W. Reeves, The Evaluation of Higher Institutions, (Chicago: The University of Chicago Press, 1936), p. 26.

The chief business administrator should be given the rank of vice-president or dean. Unless he is given such a rank, there may be some inference that the business function of the university is not equivalent to other functions. He might be placed at a disadvantage of authority when dealing with business matters unless his rank is the equivalent of those with whom he deals. Certainly the importance and critical nature of his duties entitle him to the rank even without the other practical organization considerations.

Five line personnel and two staff are shown as reporting to the chief business officer. The line personnel are the business manager, controller, plant manager, personnel manager, and the director of development. He also has two staff assistants, an analyst and a resident architect. These positions can embrace all of the varied problems of administration, and through them should be channelled all activities of a business nature. The complex nature of their problems and the many necessary decisions indicate that the span of control should not include more than these seven officers.

Another reason why the vice-president of administration should relieve himself of routine administrative duties is that his job, like that of the president, has duties of a public relations nature. He is called upon for many extra-duty type functions which are very necessary, and yet are not directly in his productive line of work. In addition, as was mentioned earlier, he has many duties to perform for the governing board.

For maximum effectiveness it is believed that the chief business officer should be almost completely free of routine duties and enabled to formulate broad policies. He should be able to circulate freely

and inspect the various parts of operations under his control. If he is bound too closely by details, his maximum usefulness is lost. For these reasons only the five major divisions of business activity are shown as reporting directly to the chief business officer. He in turn must delegate authority to the heads of these divisions. If he retains too many decisions for himself, then his own efficiency and the effectiveness of his subordinates will be lost or greatly reduced.

Analyst - Assistant to the Vice-President of Administration

An analyst, who also serves as an assistant, is believed to be a valuable and productive asset to the organization of the office of the vice-president of administration. A great amount of data and special analyses must be produced by the office. It is not anticipated that this analyst will assist with the routine, but rather with the special reports that are constantly called for. In most offices a great part of the time of the organization is spent in working up these unusual special reports. In many instances it is difficult to achieve a smooth flow of normal work due to these special reports. An analyst can perform these functions to a large degree. If the report is of such volume as to warrant other help, the analyst can best coordinate these efforts. By so doing, the vice-president is relieved of this routine type of analysis. In addition, the analyst can serve as assistant in those duties which warrant. He can act as special investigator on any desired projects for the vice-president.

Resident Architect

The resident architect is believed to be a very necessary assistant to the vice-president. During the coming years of great physical plant

construction and renovation there will be an ever-increasing number of decisions and problems involving construction. Coordinating activities between architects, engineers, and contractors will become increasingly numerous. The duties of the position are visualized to be of an advisory and supervisory nature - not duties of actually drawing the plans. These latter functions would be left to consulting architects.

Most vice-presidents by training will not be technically capable of rendering decisions on matters of construction. The fact that consulting architects are in the employ of the institution does not relieve this situation. The volume of building decisions which the administrative office will be called upon to make indicate the necessity of a specialist in the field. In addition, his services can prove valuable in coordination and supervision of the entire construction program.

The vice-president of administration of one university was most emphatic about the place of his resident architect. Due to his specialized training and experience, the architect had been able to save the university considerable amounts of money in the construction program. In addition, through his efforts, the coordination and supervision of the entire building program had been greatly improved. The resident architect did not draw any plans directly other than very minor assisting jobs. Primarily, it was his responsibility to supervise the work of the consulting architects and the construction jobs in progress, and thereby conserve the time of the vice-president.

Business Manager

Many universities use the term "business manager" as applying to the chief business officer. In this study, the business manager is in charge of one segment of the business operations (Chart VII) and

reports to the chief business officer. He is charged with all activities which tend to be in the nature of operating business enterprises. In particular these are the various university supply stores, purchasing, food services, and auxiliary enterprises. In some organization structures the heads of these services report directly to the chief business officer. However, in a larger institution, this situation is considered undesirable. These agencies play such a vital role in the operations of the university that they must be coordinated and have centralized supervision. It is easily possible for one of them to get out of proportion in its operations and present grave problems to the fulfillment of the programs within the institution.

The activities of the business manager have a very close interrelationship as indicated by the titles of its personnel. All are of an operating nature. The business manager should be free to devote his full energies to the operational problems of these business activities. By efficient operations of procurement and other commercial-type functions, these areas can contribute materially to the income of the institution, or they can be a very definite liability if inefficiently managed.

It should be mentioned that in many institutions auxiliary functions are not under the management of the business officer. Instead these areas are managed by student services or similar components of the administration of the university. With the growth of the student union more and more functions relating to students are being embraced under student services. For example, in many universities housing and food services are managed by student services with only the financing problems

placed under the business officer. However, it is the opinion of the writer that the operation of food service in particular is a commercial-type of operation. It requires specialized business knowledge and should be under the control and administration of the chief business administrator.

In discussing this problem, the vice-president of one university expressed the opinion that the answer to success in the operating type enterprises was in one factor - the manager of the enterprise. The officer was extremely emphatic on this point. He stated that a good manager was worth any reasonable price, because he could make or lose his salary many times in a year. A similar experience has been noted to some degree by almost every university. In addition to these considerations, the effective operation of these enterprises has much to do with the morale of the faculty and the student body. Much dissension can arise if their functions are not properly performed. Probably it is for this reason that some universities have tended to link the services closer to student services as was mentioned earlier.

Supervisor of Stores and Business-type Services

The stores function and the purchasing function have one feature in common - they are each a facility for procurement of goods and services for the operation of the university. When efficiently executed, their services can economically expedite the programs of the institution. This point is emphasized because sometimes these departments may become so engrossed in the details of their own operation that they might overlook the urgent need for items within the departments which they serve. If purchasing processes and services are delayed they can

hinder the programs of the departments.

There is a strong desire on the part of faculty members to transact business direct with a supplier. However, by doing so the advantages of mass purchasing are lost. In many cases the faculty member is the only one who can adequately describe and set specifications for securing the items - therefore he feels that he should be permitted to go directly to the supplier. On the other hand the university stores have more contacts and more familiarity with suppliers and can therefore render a distinct and helpful service to the departments. By keeping adequate stocks of standard items on hand the programs are expedited. Supply stores and purchasing in any type of institution must be under very strict control and supervision. In public institutions this point is doubly true because they must also adhere to state laws. These laws sometimes make the procedures lengthy and exacting.

The problems and functions of stores and business-type services were discussed with academic faculty and staff members. Many felt that the necessity of purchasing through university stores was an obstacle rather than a facility for their programs. In some instances this feeling may have been justified. In most cases the circumstances were not known to the faculty member and there was no understanding of the problems. When they were adequately explained, there was more satisfaction felt by the faculty member. Therefore it is believed that the managers concerned must keep the faculty members informed as to the necessity for certain procedures. In particular, the person ordering the item must be informed if there are to be delays in delivery. These items may be critical and may delay a program with resulting difficulties and ill-will by the purchaser.

The problems of the stores manager and supervisor therefore have three major considerations: (1) He must get the desired items at the most economical price in conformity with existing regulations. (2) He must secure these items with the least practical delay. (3) He must strive to keep the confidence and goodwill of the using departments whom he serves by keeping them informed as to the status of their orders.

These operational problems have been introduced at this point to emphasize the need for a supervisor of stores and business-type services in the organization structure. It is his responsibility to act both as liaison agent and coordinator for the services and the departments.

Purchasing Agent

The purchasing agent in many universities for some unexplained reason, has a tendency to be loaded with a "catch-all" type of operation. The operations of the purchasing department tend to deviate from the primary duty of procurement. One purchasing agent stated that he had discussed this tendency with many other agents at national meetings, and the condition seemed to be rather universal. The addition of unrelated activities violates the principle of effective division of work and should be avoided.

The vice-president and business officer of one large private university emphasized to the writer that he had noted the tendency of his institution to put unrelated duties in the purchasing department. The officer stated that for the past two years he had been methodically removing these extra duties from the department. He had restored the primary duty of procurement. He stated that the resulting efficiency had more than justified the elimination of the unrelated activities.

In public institutions the purchasing agent has the added responsibility of keeping himself informed and keeping procedures of purchasing in conformity with state regulations. In some institutions these functions are actually performed at the state level. This policy is beyond the authority of the business administrator. However, it is not believed to be an efficient operation to remove the purchasing so far from the using levels. A purchasing department at the state level cannot be closely familiar with the problems of a university. Such a system creates too many channels for expeditious procurement of materials and services. Emergency orders are particularly difficult to clear quickly. In addition, such a system is in violation of the principle of adequate delegation of authority. It centralizes too many decisions at a level higher than the one familiar with and responsible for the problems involved.

Supervisor of Auxiliary Enterprises

Auxiliary enterprises within the university should be self-supporting. In most instances it should be possible for them to contribute to the operations of the institution. Most such enterprises enjoy a somewhat monopolistic position in that students normally will tend to patronize the university establishment. On the other hand, as has already been mentioned, the auxiliary enterprise if improperly managed can constitute both a morale and financial hazard.

Since the auxiliary enterprise is of a commercial nature it tends to require specialized skills and knowledge. Since they also tend to have the monopolistic control, there is almost a trust on the part of the university that fair and equitable treatment be accorded the patrons.

For these reasons it is believed that a trained supervisor of these operations is necessary.

Operating problems were discussed with the managers of some auxiliary enterprises. The most common difficulty mentioned was that their operation tended to be compared directly with a commercial enterprise. However, they pointed out that their operating conditions were in some respects quite different. Some specific examples of this fact which were offered were the more difficult purchasing procedures. These procedures required longer anticipation of needs, with difficulties both of overages and shortages of items. Usually the manager is not able to take advantage of sudden and unexpected bargains that can assist the profit of a commercial firm so much. The inability to hire and discharge labor quickly sometimes works a handicap not experienced in a normal business. It is therefore expedient on the part of management that it makes comparisons cautiously. It must be certain that extenuating circumstances have been considered.

On the other hand, from the point of view of university administration, inefficient or costly operations of these enterprises cannot be permitted - regardless of the circumstances. For example, if a cafeteria is operated at a loss, then the university is subsidizing the operation. Such a subsidy, if permitted, should be a matter of definite policy of the governing board. It should not be an accident or circumstance of operation which is allowed to continue. All of these conditions seem to emphasize the necessity and the place for a supervisor of auxiliary enterprises. The efficient performance of duties in this position can contribute vitally toward the smooth operations of this activity within the university.

Controller

The controller must be independent of any of the operating functions of the university. "Effective internal control requires that business operations and the accounting therefor should be separated and not performed by the same department or the same personnel."[23] The controller's position should be one of impartially regulating the operations of other departments in accordance with the budget which has been determined by higher authority. He must detect and report failures in any department of the university. As his title indicates, he must control operational expenditures to assure that they are in accordance with the budget and the policies of university administration. Although basically the controller must be an impartial and to some degree a mechanical type of function, he must also be imaginative. It is his responsibility to foresee and point out potential areas of operational improvements. Since business touches every part of an educational institution, a controller in some ways can also be a correlator of activities. However, it is again emphasized that he must not lose his independent position.

The controller is charged with preparation of all operating records. He provides safeguards through adequate internal auditing procedures to assure correctness of these records. He is further charged with preparation and transmittal of both routine and special reports to higher authority as they may be called for. It is important to note that corrective measures are not considered to be the responsibility of the controller - these are for higher authorities. His responsibility is

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[23] College and University Business Administration, op. cit., p. 110

discharged when he reports the conditions as they are found through records. He should, of course, point out the areas of difficulty in the records and give interpretations and emphasis. The corrective action should be done by the chief business administrator, or possibly by even a higher authority. However, nothing in this concept implies that the controller cannot advise and consult with departments about their problems as this is very much a part of his duties.

Some governing boards have hired independent controllers in an effort to get neutral unbiased operational reports. An organization structure with an independent controller has the weakness that the position is not under the authority of those who are responsible for the operation of the institution. Such a system indicates a definite lack of confidence in the leaders. They lose control of operations for which they are responsible. This condition is in contradiction to the principle of delegation of authority which has been covered earlier, and is not considered desirable. However, nothing in these statements infers that a governing board is not justified in hiring an independent audit. Such an audit is deemed proper at any time considered necessary by the board. Nevertheless, such a position should not be a permanent and working part of the organization.

An equally difficult organization structure which has been used by some universities is to have a controller as part of the institution, but responsible and reporting directly to the board. Again, this system does not recognize the proper authority and responsibility structure and is not recommended. The controller should be an integral part of the organization and responsible to the president through the vice-president of administration.

To assist the controller, there should normally be a chief accountant, an internal auditor, a bursar, and a budget officer. As with many other functions within the organization, it is sometimes more expedient to have one person perform more than one duty. However, in no case would this ever be true of combining the duties of the accountant with those of the auditor, simply because he would be auditing his own work.

Chief Accountant

The chief accountant is charged with the responsibility of maintaining all business records and executing all routine business transactions when properly authorized. He is responsible for preparation of payrolls, payment of bills, preparation of routine and special statements, maintenance of inventory records, and general accounting duties of the institution. However, perhaps one of the most vital functions of the office of the chief accountant is to keep the budgetary divisions informed as to the status of their funds.

The management principle of effective communications is particularly vital to the efficient operation of the office of the chief accountant. There must be a constant interchange of information both from his office to the departments and from the departments back to his office. This effective interchange materially assists in the smooth functioning of the business transactions.

Inventory supervision has become increasingly important in university administration. The increasing importance of property accountability and property insurance have made it desirable to have a supervisor in charge of these functions. It is the duty of this office

to establish and maintain property records. Like many other duties, this job in some cases has been attached to the purchasing agent. However, it is believed to be more properly a function of the office of the chief accountant. The duties are not related so much to procurement as to accountability. The duties involve inventory record-keeping, and most of the information is of a type to be more readily available in the account records.

A tabulating service supervisor is necessary in institutions that use punched card methods. His duties are closely related to the chief accountant - though he also performs many services for other sections of the university. It is the duty of the tabulating supervisor to advise and assist in systems to process the record-keeping of the institution. As was previously mentioned in the chapter on planning - business transactions should not be handled at the computer center except in an emergency. If no computer is in use in the university, then it may be that the tabulating service supervisor will also assist in setting up systems for computation of some research problems. However, this type of operation tends to present problems of scheduling and timing. Business operations must be processed on a rigid schedule, which may make it difficult to run certain type research problems during the same period. In view of these considerations, it is believed that the office of tabulating services can best be coordinated by the chief accountant.

Internal Auditor

In the suggested organization the internal auditor reports to the controller and is under his administration. This point was a matter

of contention in an interview with the vice-president of a large private university. He contended that the internal auditor should be independent of all line authority except the chief business officer, and should report directly to him. This position is very common and has much justification. By reporting direcly to the chief business administrator control of internal auditing is exercised by that officer. Since he is responsible for these operations, then there is some merit in having this direct control of the auditor.

On the other hand, an analyst and assistant has been provided the chief business officer. This analyst is free to look into any areas designated by his chief. Such analyses should provide adequate control to the business administrator. The internal auditor is then free to conduct a more routine and standardized type of audit. By reporting to the controller it is believed that he will be less subject to being assigned special tasks which would hinder the normal course of regular checks on operations.

Effective internal control requires that recording be done by one individual and accuracy be proved by another. This principle is also effective between one department and another. The internal auditor serves as a safeguard on these operations by systematic and regular auditing of transactions. It is believed that he can be more adequately supervised by the controller, and at the same time relieve the business officer from this additional duty.

Bursar

The bursar is placed under the supervision of the controller. In some institutions the position of bursar is a part of the office of the

chief accountant. However, it is believed to be a better organization structure to have the bursar independent of the chief accountant. The records of the bursar can then be processed through the office of the chief accountant. In this manner there is a better system of checking because two independent offices are involved. In addition, the bursar is subject to audit by the internal auditor.

The operations of the bursar are of a very critical nature in that he is responsible for the receipt and disbursement of all cash transactions. He is also responsible for the collection of any accounts receivable. Very close control must be exercised to prevent any discrepancies in this highly critical area of operations. The location in the organizational structure provides a maximum of checks and controls on the office of the bursar.

Plant Manager

The responsibilities of plant manager within a university tend to be somewhat different from those of a similar manager in industry. this difference was emphasized in a study by Hungate:

> The operation and maintenance of an educational plant is not primarily a business activity. It is first and foremost an educational activity that requires the direction and supervision of a personnel trained in education and its needs. Environment has an educative effect. Standards of cleanliness, light, heat, and repair, types of furniture, size and arrangement of offices and laboratories, and the assignment of space are important to the maintenance of morale of members of the faculty.[24]

As indicated earlier, the position of plant manager has been one of

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[24]Thad L. Hungate, Finance in Educational Management of Colleges and Universities, (New York: Bureau of Publications, Teachers College, Columbia University, 1954), p. 56.

growing importance in recent years - particularly with the growing plant facilities and the increasing problems and costs of maintenance. The duties of the plant manager divide themselves into the logical divisions of work of maintenance of grounds, maintenance of buildings, a and development and construction. Depending upon the size of operations of the institution, professionally trained assistants will be necessary to augment the force. However, these major divisions will form the framework for the operations.

Some studies have also recommended the inclusion of the services of communications, transportation, plant and protection under the plant manager.[25] However, it is believed that these duties are more of a business-type nature and lend themselves more readily to the administration of the supervisor of business-type activities. The responsibilities of the plant manager deal more with engineering duties relating to planning, constructing, and maintaining of buildings and grounds. Therefore these activities should be grouped together.

Grounds Superintendent

With the ever-increasing pressures for ground space, two considerations are being observed. On the one hand, the actual available land with its lawns and shrubbery and trees are fast disappearing. In crowded urban colleges the campus as such has virtually disappeared. On the other hand, the remaining campus is subjected to more severe usage. Whereas the job of the grounds superintendent may not be as extensive as it formerly was, it is becoming far more intensive, and

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[25] College and University Business Administration, op. cit., p. 18.

consequently his position is actually more critical. For this reason a definite delegation of these responsibilities is necessary.

Building Maintenance Superintendent

The duties of the building maintenance superintendent tend to fall into three main categories: preventive, long-term, and emergency duties. The position is important in the organizational structure because these operations have much to do not only with the preservation of the plant, but also with the morale of the personnel of the institution. It is well known how much dissatisfaction can result from minor irritating items of the physical plant. A person in this position has much responsibility not only for seeing that the work is done efficiently, but also for the tactful handling of the complaints. For these reasons the position of building maintenance superintendent should best be a separate individual position reporting to the plant manager.

Construction Superintendent

The function of construction superintendent embraces the expanding development of construction within the existing institution. That is, the function does not include supervision over new construction of a contractual nature, such as new major buildings. The great expansion that will be necessary in the coming years will necessitate many internal construction changes that can be done best by operational personnel rather than full scale contractual services. The importance of this internal growth and the scope of its operations seem to require a position in the organization structure for that purpose. Most minor alterations of existing structures can best be done by personnel within

the institution who are familiar with the problems. These personnel in turn can best be supervised by a superintendent who is an integral part of the organization.

Personnel Manager - Non-academic

The problems of personnel management are practically infinite. Nevertheless upon their successful handling may depend to a large degree the success of the organization. In the final analysis, particularly in a university, it is people who carry out the functions of the enterprise. How well this is done depends in large measure on the incentives and willingness with which these people perform these tasks.

H. R. Patoon, Controller of Carnegie Institute of Technology made a study of the problems of the non-academic personnel officer. He recommended, "To prevent unnecessary dissipation of the time of the president of the institution, the non-academic personnel officer should be responsible to the chief business officer...the non-academic personnel officer should be a staff officer without line responsibility."[26]

For these reasons the position of personnel manager is a critical one in the organization structure. In some state institutions the duties of the personnel manager may be governed largely by civil service regulations and laws. In such cases his position is a very necessary one for coordination and implementation of the civil service program. In general, it is the duty of the manager to establish an equitable pay scale and classification for employees. He must be particularly

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[26]H. R. Patton, "Dealing Intelligently with the Non-academic Staff," College and University Business, Vol. 12, No. 5, May, 1952, p. 31.

conscious to create and operate a system that treats all employees consistently and univormly. He must assist departments in securing personnel and other personnel matters. He must constantly evaluate the program to detect any inequities that may develop and assist the departments in correcting them. In essence it is the duty of the personnel manager to promote the general welfare of the employees of the organization in such a way as to provide for the greatest efficiency and effectiveness of these personnel.

Director of Development

Perhaps the most recent development in university organization structure has been the addition of a development officer by some institutions. Thomas A. Gonser described the functions of this position in the following manner:

> Such a program embraces three activities for the achievement of its objectives. (1) Public Relations - to build general acceptance for the institution. (2) Fund Raising - to obtain support for annual operations and capital improvements. (3) Recruitment - to provide more students of the kind wanted by the institution.[27]

The duties of this position are of such a wide variety and affect so many areas of the university that some universities have the officer report directly to the president. There is much to justify this direct reporting, primarily because his job tends to cut across the different lines of authority. The reason for this conclusion is that he is instrumental in fund-raising, student recruitment, and public relations - three of the major areas of operation of the university.

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[27]Thomas A. Gonser, "Those Struggling Development Specialists," College and University Business, Vol. 26, No. 4, April, 1959, p. 43.

One institution which was studied placed the development officer as a part of the staff of the vice-president of administration. In this instance his primary duties were mostly associated with fund-raising. However, this appeared to be a specialized use of the development officer. Normally he is concerned with all general problems of development as previously outlined. Typically the development officer will work with a volunteer operating committee which assists in development studies and programs. This committee is formed through the public affairs committee of the governing board and assists and guides the development officer in his activities. Therefore, this officer could equally well report to the president as an assisting staff officer, or he can report to the vice-president of administration. The controlling factor lies in the nature of the duties within a particular institution.

In the proposed organization, the director of development reports to the vice-president of administration. It is believed that the four major divisions as indicated on the chart embrace all of the major functions of a university and that development is not a separate and distinct function. Instead it is believed to be a part of business administration and its activities, and therefore should be under the control of the chief business administrator.

III. Summary

University organization patterns and structures have tended to be indistinct. Success of the institutions probably has been due more to the abilities of the personnel than to the type of organization structure. For more efficient management in the coming years of expansion, organization structures should be more clearly defined. At the same

time the importance of the place of the individual must be emphasized. Lines of authority and responsibility should be made more explicit and more clearly delegated to individuals. The balance of authority within the structure must receive close attention to assure that the intent of the organization structure is actually in effect. Training programs, particularly for key positions must be instituted to assure continuity and perpetuation of operations when exchange or substitutions of personnel are necessary.

CHAPTER IV

FINANCING AND FUND-RAISING

America is a rich nation. History shows that it can and will spend great sums on its internal welfare. If higher education clearly presents its needs to the people, the people will respond. This belief of the writer applies to both governmental and private sources of income for institutions of higher learning.

I. Policy Formulation

The greatest problem in fund-raising and financing for a university lies in getting the information of the needs of higher education to the people and keeping them informed. When this is done, educational institutions will have less difficulty in securing the funds which they need. Two college presidents each independently gave practically identical answers to this question of what is the greatest fund-raising problem of a university.[1] Elaborating on this point, they emphasized the necessity of presenting straight-forward factual information, impartially admitting weaknesses and emphasizing strong points.

The Commission on Financing Higher Education, in November, 1952, summarized the financial difficulties of higher education into five major problem areas: (1) inflation, (2) the expansion of educational

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[1]President Troy H. Middleton, Louisiana State University, interview, April 1, 1959, and President Joel Fletcher, Southwestern Louisiana Institute, interview, April 20, 1959.

services, (3) fluctuating student enrollments, (4) need for enlarged and modernized physical facilities, and (5) uncertain sources of income.[2] The approach to the solution of these financial problems, like many others, is believed to be through the application of basic principles of business management.

Application of planning to the problems of finance.

It is in the planning aspects, perhaps more than in any other phase of business, that a truly effective manager demonstrates his ingenuity and efficiency. Proper planning eliminates many of the difficulties which might otherwise have to be corrected later. A smoothly executed program usually has its beginning in clearly thought out plans. It is far better to spend more time in the planning stage than to rush ahead and later waste much more time in correcting the mistakes caused by lack of planning. Proper planning gives direction to the program and confidence to those who execute it. The chances of success are greatly improved when prefaced by adequate planning.

The principle of planning is one of the first introduced into the study of financing and fund-raising. Planning must come first, fund-raising follows. Therefore, while planning is by no means limited to that problem, it is the very essence upon which these endeavors must be based. The principle is equally applicable throughout all the problems which the university business officer will face. Proper and thoughtful planning must be incorporated into all the activities of

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[2]The Nature and Needs of Higher Education, Commission on Financing Higher Education, (New York: Columbia University Press, 1952), p. 59.

of university management. No manager should ever be guilty of allowing a catastrophe to happen in order to prod him into action. Perhaps in no other area is this function more important than in financing and fund-raising. He must plan for the future.

Comparison of the problems of finance of a university and industry

Using the term "manager" in its broad aspects, the problems of finance of a commercial manager are similar in many respects to the problems of the university business officer. However, there is one phase in which they tend to be decidedly different, that is, in the yearly forecast and variance of income to needs. A commercial manager in studying his needs for fund-raising and financing has before him the constant problem of forecasting sales or income. He then gears his operations to this forecast. He can usually secure more capital through normal financing mediums if there is evidence of increased sales and future income, and if his operations warrant the expenditure. Furthermore, the forecast and the level of operations are being constantly adjusted upward and downward. The forecast is subject to all the forces and fluctuations of economic factors which can cause drastic changes. These conditions make the problem of forecasting very difficult for a commercial manager.

However, it is most significant to this comparison that these changes in income will also be accompanied in most cases by a change in the size and scope of operations and expenses of the commercial concern. The level of operations tends to vary directly with the income. This characteristic might be termed an "operational gap." As business income fluctuates, the level of operations tends to fluctuate.

Commercial management's efficiency is directly measured by how quickly it can recognize and adjust to these changes. The significant point is that in most cases it is possible to make such adjustments. The scope of operations can be curtailed and the work load contracted.

In a university there tends to be a fixed ceiling on income with only the level of operations fluctuating. This condition is true because of a greater proportion of fixed income than in a commercial concern. The writer does not imply that the income of a university is fixed. However, the point is made that a greater proportion of the income is fixed through donations, appropriations, or yields on investments than is true in commercial operations.

A university manager finds himself with a comparatively fixed income which is usually predetermined to a large degree at the outset of the school year. The income does not tend to vary so directly with the problems or level of operations encountered during that year as it does in a regular business. With the exception of auxiliary and business-type enterprises, increased financial problems in any one year are usually not offset by increased income in that year. Frequently there is a long delay between the time the problem occurs and the time the finances are provided by sources of university income. Furthermore, a university business administrator does not have the latitude of expansion or contraction of the work-load that a commercial manager tends to have. Although finances may be entirely inadequate, he may be confronted with a virtual mandate to get a job done. The university administrator's yearly problem then is to make the necessary operations fit into the available income, although the two may not be consistent.

For these reasons, planning for the university manager is believed to be more critical than for the commercial manager. For a university a superior job must be done of forecasting needs. This is true because the available finances do not tend to vary directly with the needs as much as in a commercial business situation.

Forecasting the needs for finances

Fortunately there is one alleviating feature to this comparison. The level of operations of a university does not appear to be so difficult to forecast as for a commercial concern. The enrollment estimates are easier to forecast than sales. The students can be counted in the high schools with a reasonable assurance of the percentage and the rate of increase of these students who will go to college. As indicated in Charts I and II, these trends of students tend to be very consistent. As was emphasized when considering planning problems, projections of student enrollment generally prove to be very accurate.

The needs of research are insatiable. Both businesses and universities are confronted with a very difficult problem in attempting to budget for research. Policies of research are determined by the entire management team as to which programs will be pursued. The pace and progress of any given program in research is usually difficult to forecast or control. The very nature of research makes its outcome unpredictable.

The funds of a university are largely dependent upon outside sources such as governmental bodies and endowment donors. These sources are sometimes subject to unpredictable and capricious actions. Irrelevant factors such as the standing of the football team can affect the

actions of outside bodies which provide funds. Innumerable factors such as political policies, state and federal finances, business conditions, and so on, determine the total amount which a university may receive. These items may have little or no relation to the needs or requirements of a university, but may directly affect its income. University business administration must therefore "sell" its needs to its "bankers" as surely as a commercial business must convince its own bankers.

The starting point in university planning for fund-raising must be in sound budget preparation. It is impossible to sell the need if the foundation has not been firmly laid. Budget preparation will be covered later in this study. At present the assumption will be made that the needs have been properly established through sound budget practices. Furthermore, as previously pointed out, allowance must be made for the lag of time in securing the finances. In the case of construction programs, even greater foresight is needed to allow for the additional time required for actual completion of the project after the finances are secured.

The Office of Education of the U. S. Department of Health, Education, and Welfare makes a biennial survey of income and expenditures of higher education. The latest survey (not yet published)[3] as shown in Chart VIII indicates the sources of income for universities in the aggregate in the United States for 1955-56. This survey suggests the

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[3]The writer is indebted to Dr. W. Robert Bokelman of the Office of Education for making these data available for use.

CHART VIII

Current Fund Income
Aggregate U.S., 1858 Institutions
1955-56

Income for Educational and General Purposes:			%
Net tuition and fees from students		$ 725,925,526	20.0
Federal Government		493,885,532	13.6
Veterans Adm. tuition and fees	$ 15,637,185		
Regular appropriations to land-grant institutions	72,616,307		
Federal grants for contracts and research	355,575,563		
All other grants	50,056,477		
State Government		893,593,599	24.6
Local Government		106,899,851	2.9
Endowment Earnings		145,040,135	4.0
Private Gifts and Grants		245,539,085	6.8
Grants or contracts for research	49,908,941		
Alumni	18,710,212		
Churches	39,094,079		
Non salaried contributed services	32,614,352		
Corporations	15,672,970		
Foundations	24,541,432		
Others including individuals	64,997,099		
Organized Activities		192,406,342	5.3
Agricultural	23,163,853		
Medical-school hospitals	134,697,973		
All other	34,544,516		
Other Scurces		80,463,818	2.2
Total current income for educational and general purposes		$2,881,759,388	79.4
Gross Income of Auxiliary Enterprises		693,974,509	19.1
Net Student Aid Income for Scholarships and Prizes		53,038,877	1.5
Total Current Fund Income		$3,628,772,774	100.0

Source: "Statistics of Higher Education: Receipts, Expenditures and Property 1955-56." Unpublished data of survey, U.S. Department of Health, Education, and Welfare, Office of Education, 1959.

many sources of income that might be available to a university. For any individual institution it may be that they are not taking full advantage of all potential sources of income. The business administrator must analyze his own situation with a view to concentration of efforts to expand every proper source of income. This study will follow the sources of income of institutions of higher learning in the United States as a guide and point out observations pertaining to those sources.

II. Sources of Funds

Tuition and fees from students

Chart VIII indicates that 20.0 per cent of the current funds of universities were obtained from tuition and fees for 1955-56. Student fees in public institutions represented 10.0 per cent of total current income in 1955-56 and 9.0 per cent in 1953-54. In private institutions student fees represented 32.7 per cent in 1955-56 and 31.0 per cent in 1953-54.[4]

Although the emphasis on fees may be different in the two types of institutions, the basic problems appear very similar. The matter of student fees involves many more considerations than merely the raising of income. For private institutions there is the concern of limiting the number of students and thereby limiting social diversity of the student body. Some private institutions may even fear that raising fees will actually lower enrollment so much as to lower revenue. For public institutions there are the sociological and traditional implications.

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[4] Statistics of Higher Education: Receipts, Expenditures and Property 1953-54, U. S. Department of Health, Education, and Welfare, (Washington: U. S. Government Printing Office, 1957), p. 39.

The prevailing mineteenth century attitude toward public education prescribes that tuition and fees shall be held at a minimum. It is significant, however, that although the attitude has been against raising tuition fees, actually in practice fees have gone up greatly. In a survey by Herbert S. Conrad and Ernest V. Hollis which covered 196 institutions of higher education it was found that fees for these institutions were raised 85.0 per cent between 1940 and 1955.[5]

The terminology of educational fees varies widely between institutions. In many instances there is a definite attempt to disguise the tuition charge merely by a different name. Common terms used are: registration, matriculation, library, laboratory, general, contingent, incidental, building, and many others. In addition, there are special charges for special types of services, such as charges for change of course and late registration. Whatever the name, these charges are classed as educational fees as differentiated from activity and auxiliary enterprise fees.

There are certain advantages in using different types and itemized charges. By indicating the fees separately, both the student and the parent are shown the number of services that are received for the fees. However, there is a danger of misunderstandings when the terminology is used simply as a means of hiding the total cost. Institutions should clearly present the fee schedule. If appropriate, the fees should be grouped according to educational charges, student activities charges,

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[5]Herbert S. Conrad and Ernest V. Hollis, "Trends in Tuition Charges and Fees," Methods of Financing Higher Education, Annals of the Academy of Political and Social Science, September, 1955, p. 53.

and living charges. It is most important that the grand total be clearly set out as a separate total.

Penalty charges have proven to be a very useful and satisfactory method of impartially discouraging students from increasing administrative burdens. While producing some additional income, the primary advantage of this type of charge is to prevent and reduce some of the extra problems of handling administrative details. Laboratory deposits for breakage charges and similar items promote diligence in the care of property.

Is there really an inverse relationship between higher fees and enrollment? If so, will a raise in fees cause a drop in enrollment so that net revenue does not increase? Do fees really tend to limit educational opportunity?

A comprehensive statistical analysis of these questions has been made by Richard H. Ostheimer for the Commission on Financing Higher Education:[6]

> The essential finding of this analysis is the tendency for larger enrollments to be associated with lower student charges, other things being equal. For a given number of youth, a 25 percent higher average charge, for example, has associated with it a 5 percent decrease in enrollment, a relationship which may be characterized as an inelastic demand.[7]

The author cautioned that these figures must be applied and

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[6]A detailed explanation of statistical methods which were used will not be given here. However, it might be mentioned that the basis of the study was to eliminate the influence on enrollment of three variable factors among states: Per capita income, educational attainment among adults, and proximity of institutions to population. The resulting residual was the basis of the conclusions.

[7]Richard H. Ostheimer, Student Charges and Financing Higher Education, Commission on Financing Higher Education, (New York: Columbia University Press, 1953), p. 101.

interpreted with discretion. There were many indeterminate variables in the study. It was an aggregate study and any individual institution may not respond in a like proportion. Nevertheless, the survey does give reasonably authoritative evidence that there is an inverse relationship between enrollment and higher fees.

However, it is interesting to note that the study also revealed that one-fifth of the students attended out-of-state institutions. The migration was greatest to states whose institutions charged the highest fees. Lower charges could not have been the motive, because it is estimated those students paid a 60 per cent larger fee as out-of-state students. The writer wishes to emphasize that no conclusion is drawn that higher fees caused the migration of students to those universities. Certainly that would be an erroneous conclusion. Instead, it is desired to point out that fees alone do not appear to be the determining factor in the selection of an institution. The evidence indicates that fees have little or nothing to do with this selection.

There did appear to be almost conclusive evidence that the demand was inelastic. Despite possibly fewer students, higher tuition will therefore yield a larger total revenue. That factor becomes very significant to decisions within this study. Assuming that other considerations of university policy are not to the contrary - a university can raise net total revenue by raising fees. The drop in enrollment (if any) will not offset the increased revenue. It should be remembered that the business administrator alone does not have the power to raise fees. This action normally is done by the governing board. However, it is the responsibility of the business officer to advise on the question of student fees.

However, these conclusions are based upon the premise that the university stays close to the average fees within its particular class and location. Should the university get far above the average for its class of institution, then the principle of substitution may change the inelastic demand. The students may simply go to an equally suitable but cheaper school.

Some opponents to the idea of minimum fees argue that in purely economic terms higher education has proven to be a profitable investment for the individual. Therefore, universities should raise fees accordingly. The increased income could permit more aid through scholarships to be given to talented students. There is much in favor of this argument except that if carried to extremes it could tend to limit initial enrollment in higher education on an economic basis. As has already been pointed out, it is believed that public and political pressures will prevent this action.

A grave danger of higher fees, primarily to private institutions, could lie in the temptation to admit and maintain students who have financial means but lack intellectual ability. If income fluctuates too closely with enrollment there may be a serious tendency to lower the quality of higher education. Higher education must hold itself above the simple expedient of purchase. However, Dr. Ostheimer believes that in reality it would be otherwise. "The net effect of raising student charges would probably be, in most cases, a quality improvement if income were increased thereby: any adverse effects would be more than offset by the ability to increase expenditures."[8]

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[8]Ibid., p. 164.

No discussion of fees in relation to educational opportunity would be complete without pointing out the closely related problem of cost of living for the student. Even if tuition were zero, many families could not afford to send their children to college. In most cases, unless the student can live at home, the actual tuition is a minor part of the total expense of his education. It is believed that this is one of the major reasons why the tuition alone presents an inelastic demand - it is only a minor part of the total cost.

A study of the costs of attending college was made by the United States Department of Health Education and Welfare. The study found:

> It was the cost of living at college rather than educational costs that made it so difficult for low-income families to finance attendance of a son or daughter at most colleges. Living costs consumed five-sixths of the average budget of students who attended public colleges, and two-thirds of the budget of those who attended private institutions.[9]

It is therefore believed that whereas tuition rates do affect enrollment, this factor is of such small significance that it should be given very little weight in the ultimate decisions of business management toward raising fees. In the aggregate, there will be few denials of opportunity because of this factor alone. Indeed, it is highly possible that the reverse may be true. If adequate finances are denied the university, opportunity may be denied the student.

In consideration of these factors, it is recommended that from the point of view of economics alone, there should be no hesitancy of university management to raise its fees. This recommendation is particularly true if the fees are below the average for the location and

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[9] Costs of Attending College, U. S. Department of Health Education and Welfare, Office of Education, Bulletin No. 9, (Washington: U.S. Government Printing Office, 1957), p. 25.

and grouping of the university under study.

Federal assistance

The Federal Government provided a total of $493,885,532 or 13.6 per cent of the total current income for higher education in 1955-56 (Chart VIII). The same assistance for 1953-54 was $419,561,974 or 17.8 per cent and for 1943-44 it was $309,101,458 or 35.6 per cent of the total current income.[10] Although increasing in total, the proportion of Federal aid to higher education is decreasing. There has been a decline in the payment of veterans' tuition, but it has been far more than offset by the rapid increase in contract research. With this trend toward more contract research, private institutions have received a decidedly larger proportion of Federal income.

All evidence indicates that contract research will continue to play a large part in future university financial planning. Before World War II governmental research was done to a large extent in laboratories of its own. The government later realized that universities are the focal point for the accumulation of scientific knowledge and began more concentration of research at that point. The contractual relationship proved to be the most satisfactory method for mobilization of this knowledge. With the pressure for increased research in the "space age" and in medical research, the trend is increasing toward more funds in the field of contract research. Estimates of the Bureau of the Budget indicate that about 64.0 per cent of all research was concentrated in physical sciences, about 33.0 per cent in biological sciences and only

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[10] Statistics of Higher Education 1953-54, op. cit., p. 39.

3.0 per cent in social sciences.[11]

Those who oppose Federal aid to education claim that it will result in Federal control of curriculum, personnel and possibly even entrance or admission policies. They say that as the Federal Government increases its support, local and private sources will diminish their support. And finally, they say that the feeling of responsibility for a community will diminish as its financial obligation is removed from the community to the national capital.

The President's Commission on Higher Education recognized this danger of removing academic freedom by substituting governmental control through Federal support:

> Sound public policy demands that the state be able to review and control educational policies in any institution receiving public funds. The acceptance of public funds and thereby public control by private institutions would tend to destroy the competitive advantages and free inquiry which they have established and which are so important in providing certain safeguards to freedom.[12]

Actually the Federal Government has been a constant contributor to higher education since the First Morrill Act of 1862 (some grants were even earlier). The support has taken many forms such as R.O.T.C. programs, veterans' payments, agricultural experiment and extension services, and many others. Therefore the "dangers" of Federal assistance as outlined are not new. The assistance has been given for many years. The only question is the degree and the application of the assistance.

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[11]John D. Millet, Financing Higher Education in the United States, (New York: Columbia University Press, 1952), p. 352.

[12]President's Commission on Higher Education, Higher Education for American Democracy, Vol. V., (Washington: Government Printing Office, 1947), p. 58.

Apparently the greatest single danger of Federal assistance as far as the business administrator is concerned, is the danger of withdrawal of support in any area that has become a permanent part of the university program. By becoming accustomed to the assistance in a given program, a certain level of operations is reached. People generally are on the payroll and obligations of a permanent nature have been incurred. If the support is withdrawn, the program must nevertheless be continued, resulting in financial stress.

However, with the exception of some war contracts which were clearly defined as such, this danger of sudden withdrawal of support has not materialized. Most administrators with whom the subject was discussed felt that Federal aid not only was an inevitable part of our financial structure in higher education, but that it would continue to rise. Therefore, they were of the opinion that the universities that would benefit the most would be those which actively sought Federal aid.

It is interesting to note that some philanthropic organizations purposely give funds to get projects started then withdraw the funds in order to force complete support from a university on a continuing basis. They justify this policy on the grounds that it gives impetus to new programs of work. However, unless the business officer anticipates and is prepared for such removal of assistance, it can easily lead to a strained financial budget or abolishing of certain programs.

One university official who was engaged in research pointed out that Federal support is often given in the form of personnel, not in funds. He explained that personnel from a department of the Federal

Government were often assigned to the university to assist in the conduct of certain experiments. These persons were paid by the Federal Government. However, often they were not given adequate support funds such as travel funds or supplies to carry their full share of the added overhead to a project. To this extent it was necessary for the university to supplement the project because of the addition of the new person.

The above background is vital to the decisions of a university business administrator. He is concerned with the permanence of financial support to his institution. Since many of the contracts from the Federal Government have been related to national security, there could be a sudden withdrawal of assistance in these fields. The business officer is also faced with the administrative details of constantly renewing research contracts which must normally be renewed every two to three years.

Another financial problem is the division of costs between the government and the university for the research work. Again we see the similarity of problems with those of the commercial manager. The allocation of overhead is a constantly troublesome management problem. The principle of sharing in the overhead costs is well established and generally agreed to by most governmental agencies. However, the exact percentage of overhead is not universally accepted.

A section of the procurement regulations of the armed services covering the question of overhead has become known as "the blue book." It is accepted by many other government agencies. Generally the blue book formula allows overhead rates of 40 to 45 per cent of the salaries and wages on a project. By congressional limitation certain agencies have limits of overhead which may be charged to that agency. The Public

Health Service allows 8 per cent over direct costs. The National Science Foundation allows 15 per cent. Before recommending acceptance of such a grant a business administrator must decide whether or not the additional benefits of the grant offset the additional overhead cost to his institution. Accurate cost figures for operations are therefore very helpful in such decisions.

It might be pointed out here that almost identical problems for universities are arising in contract research grants with private industry. There is an increasing tendency for industry to use university resources as a research and testing field for its products. This particular problem was discussed with the head of one department. He had adopted a policy of insisting that before he would accept a grant or contract on the terms of the company that they would provide an equal amount for completely free research in his department. Although this was an isolated case, the success of that plan has proven to be remarkable. It has been in effect about four years.

One university official discussed in an interview some of the difficulties that were being experienced at his institution because of Federal policies. There was a very strong tendency to influence the curriculum of the university simply because of the emphasis on physical sciences. As this emphasis increases to get specific projects done, there has been less emphasis on basic research. It has channeled personnel and resources into specific lines of inquiry, rather than to have a natural evolution from basic research. In other words, the structure was being made before the foundation was laid. He termed the resulting situation "research in a vacuum."

Even more troublesome, this official pointed out that research contracts have a disturbing tendency to limit efficient space utilization within the university. Specifically he pointed out that a project would be started in a given area and that area was thereafter closed to further use - although the space might be utilized only a fraction of the time by the contract research program. His university is considering separate buildings apart from the main campus for this type of project. Consideration is being given to a cheaper type of construction, but one which might be utilized after the project is completed. Under those conditions it is felt that the project could bear a sizeable part of the cost of construction. These are purely future ideas - no attempt at such plans have actually been made by that university.

Nevertheless, even in the face of these difficulties, the official felt that contract research had been beneficial to the institution. If safeguards were used to prevent some of the troublesome aspects as outlined, the benefits were well worth the efforts of the programs.

In selling his needs to his "bankers," the university business officer may occasionally encounter the feeling of a lack of obligation at the community or state level because of Federal support. However, it is believed this will be a rare occasion and prompted only by lack of knowledge of the facts. A clear presentation of the facts and needs of the institution should correct this situation.

It is therefore the recommendation of this study that every effort be made to increase the revenues from Federal income sources. Adequate precautions should be taken as far as possible to prevent incurring permanent obligations beyond the contract periods. Also, care should

be exercised that the projects or programs carry their full share of expenses.

State and local government support

Discussions on the subject of state and local government support were held with university officials whose responsibility it was to guide such policies. For all of the political considerations, it was the unanimous opinion that the best policy in the long-run for dealing with government officials at these levels was a straight-forward presentation of factual information just as it existed. Special mention was made of the practice which is sometimes observed of holding social functions of many kinds which have as their prime motive the influencing of appropriations. Such practices may have short-range benefits, but it was the opinion of most that these practices eventually resulted in a distrust that was detrimental to the long-range best interests of the institution.

As shown by Chart VIII, state governments contributed $893,593,599 or 24.5 per cent of the total income of higher education. Local governments paid $106,899,851 or 2.9 per cent of the total income. As liberal as these contributions might appear at first, actually higher ecucation has not received in proportion to other state agencies as will be shown. Getting the facts and information to legislative members is therefore a necessity for those universities that receive state and local support.

It would appear that higher education has not done an adequate job in making its needs known to the state and local levels of government. Expenditures for higher education at state levels have lagged alarmingly behind those of other state agencies. Although it is a well known fact

that many state governments are in very serious financial difficulties, it has been largely due to pressure groups of other agencies. How drastically higher education has been passed over in appropriations is shown by a study of the Bureau of the Census: Between 1913 and 1953 total expenditures by the state governments multiplied 43 times. During the same 40-year period state expenditures for higher education increased only 26 times. In contrast, state expenditures for public welfare multiplied 96 times; aid to local governments, 59 times; and highways, 107 times.[13]

There is another significance to these figures in addition to emphasizing how other state agencies have profited from appropriations more than higher education. They serve to illustrate that the states were able to support higher education, provided the case had been properly presented.

> The Commission on Financing Higher Education has noted that those states with relatively low per-capita income payments are generally making greater effort to support higher education than are the states with high per-capita income. In wealthier states increased support of higher education is not primarily a question of ability but of creating in the public a greater willingness to appropriate needed funds.[14]

What then are the responsibilities of the university business administrator in such a far-reaching problem over which he admittedly has little direct control? In the first place he must make every

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[13]Bureau of the Census, U.S. Department of Commerce, Historical Statistics on State and Local Government Finances 1902-1953, State and Local Government Special Studies No. 38, (Washington: Government Printing Office, 1955), p. 19

[14]Higher Education in a Decade of Decision, (Washington: The National Education Association and the American Association of School Administrators, 1957), p. 142.

effort to keep all of his superiors informed with the pertinent facts on the status of support within his own state. He must bring these facts to the attention of the public and state officials at every appropriate opportunity. One suggested method is through other members of the faculty. This can be done through simple factual informational sheets. These faculty members have broad contacts at almost every level of the state. A university enjoys a privilege of contact beyond that of perhaps any other state agency. Nevertheless, few speakers take the opportunity in these contacts to give a few brief and pertinent facts of the needs of higher education. It is not proposed that the speakers become ambassadors of fund-raising, nor is it suggested that they depart from their special subjects. However, it is suggested that they can in most instances bring in some pertinent data of needs of higher education which would be both relevant and helpful to the subject about which they were speaking. By providing informational literature to these speakers the business officer can multiply his own efforts many times in reaching the people with the facts.

A state-supported university finds itself in somewhat of a dilemma in the matter of "campaigning" for funds. Traditionally there is a reticence to engage in politics. A university normally remains apart from such activities. On the other hand, unless the university does push its interests, its appropriations are likely to suffer - as evidenced by the proportion which higher education has received compared to other state agencies. The problem then is how to reach these legislators with a dignified but factual and forceful presentation.

One method that has been tried with success was to have meetings

at strategic locations over the state for the sole and expressed purpose of factually presenting the problems of the university. A definite and organized effort was made to see that influential persons, prominent citizens, and legislators attended the meetings. There was no pretext of a social gathering, but rather a straight-forward expression as to the purpose of the meeting. These meetings were well attended with an indication that the people themselves were voluntarily seeking information. All evidence indicates that the net benefits from this educational presentation were effective in the appropriations which were received.

Individual and personal contact with legislators by alumni is a most effective and direct approach to the distribution of information. However, the alumni must be kept well informed with accurate information about the status of funds and needs.

Another effective tool is to point out clearly the manner of preparation of the budget. In this regard the business officer can be particularly helpful. After the final budget is prepared, there have been many items and requests that have been eliminated. In addition to the needs as finally presented, it is effective to indicate the conservatism that has been exerted through the elimination of many items. In general form those items that have been eliminated from the requested budget should be indicated.

Tax exemption for private institutions is another state aid which has proven of great assistance to that type of college and university. The Commission on Financing Higher Education reports that the state of Nevada is the only one in the United States that does not have laws

exempting private institutions of higher education from taxes, and Nevada has no such institutions.[15] The report estimates that this tax exemption amounts to some 50 million or more dollars in exempted taxation.

Many universities have placed development and fund-raising officers on their official staffs. This position was covered more fully in Chapter III on organization. The importance of this operation has become so great as to demand a specialist in the field. Of course these development officers concentrate primarily on endowment type funds, but in view of the experiences of state universities compared to other state agencies, it may well be a worthy function to work toward legislative benefits also.

The fact that other state agencies have fared so well, apparently at the expense of higher education, lends emphasis to the belief that every possible and practical media must be used to bring the facts and the needs of higher education to the attention of the citizens and particularly to the legislators at every possible opportunity.

Endowment earnings

Endowment earnings represented an income of $145,040,135 or 4.0 per cent of the total income to institutions of higher education in 1955-56 (Chart VIII). However, endowment income is very unevenly divided among institutions. Of the total, $128,755,547 or 88.0 per cent was income to private institutions.[16] To distort this picture of distribution

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[15] Millett, op. cit., p. 333.

[16] Statistics of Higher Education 1955-56, op. cit.

further, eighteen private universities received 87.0 per cent of the total endowment income of all universities.[17] Therefore the relative importance of endowment funds to any one university may vary widely.

Responsibility for management of endowment funds typically rests with a committee of the governing board. However, many other plans are also in effect - such as management by the entire board; an officer of the college such as the treasurer or business officer; a commercial agency employed as trustee; or employment of an investment counsel. Should the latter method be used, caution must be exercised that the counsel has a completely impartial interest in the investments.

The most commonly experienced difficulty with endowments lies in their restrictive clauses. Endowment funds normally keep the principal intact and therefore go on in perpetuity. However, as time goes on the original purposes of the endowment may become either impractical or impossible. In some cases it has even been necessary to get relief by court action. At the time of the gift neither the donor nor the beneficiary may be able to visualize what difficulties the stipulations of the grant may bring.

For these reasons it will be wise on the part of the receiving institutions - and particularly on the part of the business officer to examine closely the terms of bequests to the institution. It may be possible through tactful negotiations to lift many of the restrictions which at a later date might make the gift useless or even a hindrance.

If it is the responsibility of the business officer to manage

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[17]Millett, op. cit., p. 308.

endowment funds, then he must study carefully the terms of the endowment. Many universities have quite unknowingly violated the terms of the bequest, much to their embarrassment. Management of these funds entails the responsibility of wise but safe investment. Some institutions have adopted a "formula system" by which a predetermined and fixed ratio of funds must be in bonds or stocks. Due to the extreme responsibilities for safety, the investments of endowment funds may not yield as much as a typical portfolio might be expected to do.

As mentioned previously, many universities have placed a development officer on the permanent staff. It is the duty of this officer to solicit endowments and bequests. One business officer pointed out that their development officer worked closely with their medical school and medical graduates. He also worked with law graduates. Through these contacts many donors were found who were looking for places to make bequests.

Private gifts and grants

Very closely allied to endowments and presenting many of the same problems are private gifts and grants. The same difficulties of restrictive clauses are encountered. However, this class of income normally does not keep the principal intact. Gifts and grants represented income of $245,539,085 or 6.8 per cent of the total for higher education for 1955-56 (Chart VIII). As with endowments, gifts and grants also are very unevenly distributed - and in almost exactly the same proportions.

Grants or contracts for research normally are given by businesses for specific types of work in which they are interested. Many industries

are using university facilities as service and testing centers for their products. In many instances this testing can be done more efficiently and more economically by the university. In such cases the university is justified in charging a fee for its services in the form of an overhead charge. If grants are restricted in their nature so that the university performs a service for the grantor, then a charge is also justified. Acceptance of these grants and the amount of the overhead fee to be charged is a matter of policy for the university administration. However, the writer believes that grants should be accepted only if they tend to further the programs of the university. They should not be accepted if the grantor is merely employing the university as a testing facility for something that has no relation to the interests of the institution.

Universities have a great potential for research. If they can select the type of research contract which will further their own existing programs, it will go far to assist their financial status. There is a natural tendency on the part of grantors to seek those programs which are already outstanding - therefore the tendency to supplement research will be a growing one if properly encouraged by university management.

Alumni funds and gifts are the fastest growing of the private gifts and grants.

> Alumni giving to American higher education climbed 29% in 1957-58...Despite a drop from the previous survey in the size of the average gift from $35.60 to $32.03, the annual alumni funds recorded significant gains in the number of contributors (from 1,016,484 to 1,211,395).[18]

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[18] Higher Education and National Affairs, Vol. 8, No. 9, March 9, 1959, (Washington: American Council on Education), p. 4.

Alumni fund-raising first centered around the capital fund drive. Professional fund-raisers were employed to work with alumni and the university administrations. However, gradually the alumni and the administrators began to realize that they were trying to meet a continuing need on an intermittent basis. From this concept the annual alumni fund had its beginning. Closely allied with this concept was the development program and the development director. It is designed to make giving a sustaining and continuous affair. However, in order not to lose the benefits of the capital fund drives, these drives are still in effect, but for specific purposes. Capital fund drives are aimed at securing new buildings or new programs.

A timely warning for business administrators or college officials in attempting to raise alumni funds was given by Ernest T. Stewart, Jr., Executive Secretary of the American Alumni Council:

> Too often college officials, enchanted with the results of alumni fund raising but woefully ignorant of the theories, have launched solicitation without developing other facets of an institutional alumni program. The shock when it came was rude, for you cannot raise funds in a vacuum. You cannot expect to get anything from your alumni without giving something to your alumni.[19]

The basic principles of organization and planning nowhere apply any more strongly than in the field of alumni giving. Most universities have alumni organizations, but it is necessary to have them actively organized and directed. If this framework is first firmly established the problems of fund-raising become simpler.

For public institutions in particular there is a by-product of

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[19] Ernest T. Stewart, Jr., "Alumni Support and Annual Giving," Methods of Financing Higher Education, op. cit., p. 32.

alumni fund-raising that appears to have a beneficial effect. More active alumni organizations stimulate general interest in university affairs. Such stimulation it would appear should have its effect ultimately in legislative appropriations. There can be little doubt that interested and influencial alumni do have a beneficial effect in such legislation.

Emphasis on alumni giving must not overlook the possibility of gifts and contributions from other individuals. Many individuals realize that they have a stake in higher education and benefit from its services. Some will give purely because of this philanthropic attitude. Others may give because of beneficial income-tax provisions both of state and federal governments. In any event this source must not be overlooked as a potential source of funds.

Church-related gifts are a highly specialized type of donation and only mention will be made of it here. However, it is significant that these church-related universities and colleges form a significant part of the educational framework. They too feel financial difficulties. Church ministers and members are in a strategic position to know about promising young people in a community. Church groups could be encouraged to give individual scholarships and to take an active interest in promoting the welfare of individuals who need assistance. Such plans could add materially to the income of a college and would be the type of activity suitable and acceptable to the church. Like many other activities - the mere stimulation of interest would be of benefit to the institution.

Non-salaried and contributed services made up a surprising $32,612,352 of the total gifts (Chart VIII). These services were

contributed primarily in the professional fields, particularly of medicine. They can form a lucrative source for those institutions who can secure and use these services.

Perhaps one of the greatest potential sources of philanthropic giving is the corporation. According to figures of the U.S. Treasury Department, corporate contributions in 1950 were about 250 million dollars, but this amounted to only a little more than 0.6 per cent of corporation net income before taxes. Federal corporation income tax laws allow a deduction of up to 5.0 per cent for contributions. Furthermore, of this 0.6 per cent only about 17.0 per cent went to higher education, including scholarships and fellowship assistance.[20] It is therefore evident that the level of giving by corporations to higher education has scarcely been touched.

Corporations on the other hand are aware of their responsibilities and are increasingly interested in contributions. In October, 1951, the Executive Committee of the Board of Directors of the National Association of Manufacturers said:

> Industry recognizes the essential contributions made by these institutions (universities) to the development of leadership to manage its increasingly complex operations... Business enterprises must find a way to support the whole educational program effectively, regularly, and now.[21]

The problem then of the university business administrator in relation to corporate giving is to promote the idea that corporations do have a definite interest in the financial well-being of higher education.

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[20] Millett, op. cit., p. 454.

[21] Ibid., p. 457.

In most instances corporate giving tends to be in specialized fields or is highly localized. Institutions located near industrial centers may tend to be in a better position to secure such aid. Actually the university has three sound reasons to offer industry why it should contribute to higher education. (1) Industry is constantly using the knowledge of universities in general fields of economics, management, and many other areas. (2) Industry draws its management largely from university sources. (3) In many cases universities provide direct services for industry. It is therefore fitting that corporations should share in contributions to higher education.

It might be noted that corporations have been very public-spirited in the cases of hospitals and other civic enterprises. No doubt the reason is that these enterprises have been more active in presenting their cases and their needs to the corporations. It is firmly believed that the corporation is possibly the greatest non-governmental potential for future income of institutions of higher learning. The problem lies in higher education properly presenting its needs.

III. Summary

The most important solution to the problems of financing and fund-raising for university business management is to present clearly its needs to the people. To assist in accomplishing this aim, some institutions have appointed a director of development whose responsibility it is to guide planning and fund-raising efforts. Proper planning and budget preparation must precede these fund requests.

Student tuition and fees were found to present an inelastic demand,

with no appreciable effect upon the selection of a college by a student. Therefore, in most cases, fees can be raised to provide an added source of income without significantly reducing the number of students.

The Federal Government has been a constant contributor to higher education since 1862, and there appears little danger of sudden withdrawal of support as some fear. Contract research appears to be the single greatest source of new funds from this source. However, the writer feels that any new contracts for research must contribute to the program of the institution.

Higher education has not shared in state funds as well as other state agencies. Universities must keep the legislatures better informed as to their needs. In particular, they must give better budget preparations and presentations to justify their requests.

Corporation support appears to be the greatest potential source of income for higher education. Corporations could expand their level of giving because their contributions are very far below the allowable of deductions for income tax purposes. Furthermore, corporations must be shown that they have a responsibility to higher education, and will share directly in its success or failure.

In the final analysis however, the problems of finance will only be solved by a properly informed public. "Public demand has shaped the evolution of American education, and informed public opinion will largely determine the future pattern."[22]

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[22] James B. Conant, The Citadel of Learning, (New Haven: Yale University Press, 1956), p. 51.

CHAPTER V

OPERATIONAL POLICIES

I. Policies of Control

Planning and control are inseparably linked in an efficiently managed organization. As discussed in Chapter II, control is the function of making sure that events conform to plans. It is the function through which every manager at whatever level, from president to foreman, sees that the actual execution of plans is in conformity with that which was intended.

As with other elements of management, the principles of control tend to be universal. The principle that applies basically to one industry or organization applies almost equally to another. Henri Fayol's general statement concerning control of enterprises applies equally to a university today:

> In an undertaking, control consists in verifying whether everything occurs in conformity with the plan adopted, the instructions issued and principles established. It has for object to point out weakness and errors in order to rectify them and prevent recurrence. It operates on everything, things, people, actions.[1]

Control applied only as a corrective device for errors which have occurred performs only half of its purpose. It must be a preventive as well as corrective function. For this reason foresight and planning,

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[1]Henri Fayol, Administration Industrielle et Generale, translation by Constance Storrs, (London: Sir Isaac Pitman & Sons, Ltd., 1949), p. 107.

and in many cases almost an instinct, must guide the manager in setting preventive type controls. Events of the past serve only as a guide to the future. Therefore every effort must be made to interpret these events into future possibilities and make corrections before deviations occur.

Certain basic and universal requirements of controls have been advanced by Koontz and O'Donnell. They point out that not only are the requirements universally applicable between industries or organizations, they are also applicable at all levels of management within the same organization. They say effective control requirements must: reflect nature and needs of the activity; report deviations expeditiously; be flexible; reflect organization pattern; be economical; be understandable; and assure corrective action.[2]

Some of the aspects of these requirements as they affect a university business organization might be noted: (1) The controls must be adapted to the needs and the nature of the activities of the institution. (2) Regardless of what system or devices of controls are employed, they must be applicable to the problem under consideration, otherwise there may be a system of useless controls without reason. It sometimes happens that the need for a control in a certain area no longer exists and yet the control continues.

Controls may sometimes be instituted because of one isolated instance that may never occur again. Nevertheless the organization and its individuals are subjected to an unnecessary control for years to

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[2]Harold Koontz and Cyril O'Donnell, Principles of Management, (New York: McGraw-Hill Book Co., Inc., 1955), pp. 546 - 549.

come. Every institution can find within its organization such controls whose usefulness or practicability have long since ceased to exist. It is interesting to note that few controls are ever removed - there is usually only a constant application of more controls In discussing this matter one dean stated that he did not recall when a control had ever been removed. Once applied, apparently all controls tend to become permanent. Therefore a constant and continuing evaluation is necessary to make certain that only necessary controls are in existence and that they reflect the nature and needs of the institution.

Control systems must report deviations expeditiously if they are to be effective. Information and reports must be timely enough to be of use. A report that is inaccurate by a small amount, but rendered immediately, may be of far more benefit than an exactly accurate report rendered too late to make corrective action. Ideally, a control should reflect deviations before they actually occur. Since in many cases this is almost impossible, the next best thing is to have the deviation reported as promptly as possible. However, it is recognized that from a practical standpoint, this concept also has its limitations. From an economical standpoint, it is impracticable to have absolutely immediate or constant reports. However, the basic principle of being as expeditious as possible must be observed.

Controls must be flexible. A university is a dynamic organization which is constantly changing. If controls are rigidly applied without the principle of flexibility, the usefulness of the organization will be largely destroyed. President Conant of Harvard recognized this principle when he wrote:

> The great strength of American universities during the period of expansion of the last fifty years has lain in the ability to experiment with new educational procedures and to explore new areas of thought. Without adequate mobile funds, the progress of a university would become frozen and Harvard would enter a static period of educational history which might become a period of stagnation.[3]

The United States Army is normally considered to have extremely rigid organizational control. Nevertheless one of its great generals was most emphatic on the possibility of too rigid control. In numerous conferences the general made the observation that any follower could rigidly follow or enforce a set of rules that had been given only for guidance, but a real leader knew how and when to be flexible in the rule.[4]

Controls must reflect the organization pattern. This requirement is very similar to the first of adapting to the needs of the organization. Since the organization framework is the means through which control is to be accomplished, the controls must conform to this framework. If a department or an operation is to be guided, then the controls must apply to that departmental level. Otherwise they are likely to be irrelevant and hence ineffective.

Controls must be economical. It would appear that this requirement would be almost self-evident. However, many times a control system may be established to govern a given area which is more costly than any deviation from the plan could be. This type of situation, like the one cited earlier, usually grows from one isolated occurrence

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[3]Paul F. Douglass, Six Upon the World, Chapter VI, (Boston: Brown & Company, 1954), p. 395.

[4]General Isaac D. White, Staff Conference, November, 1945.

which causes an unusual restriction to be placed upon the operation to prevent a later recurrence. In actuality the chances of a recurrence might be extremely remote in the first place.

Controls must be understandable. In the final analysis university control is only as effective as the reception which it is given. If the control is not completely understood there is little chance that it can be effective. Simplicity is a necessary attribute of the system. For the university business administrator there is a particular point about which he must be conscious. His is the field of business, but his controls are being applied among personnel who in most cases are not business trained nor business conscious.

The President of the University of Illinois (then President of Wayne University) humorously, but aptly, described this situation:

> The typical compendium of rules, regulations, procedures, policies and general information may be clear to the auditor, but to the average academic staff member it is about as useful as the unintelligible instructions that are given for the assembly of a new household gadget.[5]

A control or directive which may be completely clear to the business officer, may be meaningless to those who receive it. Terminology must therefore be simple, clear, and direct in order to be understood by all. The administrator must recognize that university personnel are academically inclined and are not particularly mindful or aware of normal and necessary business procedures.

And finally, controls must assure corrective action. It seems

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[5]David D. Henry, "The Business Officer's Role in Top Management," College and University Business, September, 1951, Vol. 11, No. 3, p. 20.

quite apparent that there would be little use in having even the simplest form of control unless some benefits and corrective action resulted. The control should not only disclose the fact that a deviation has occurred, but should also indicate wherein it occurred, and if at all possible should show why it occurred, and who was responsible. To a large degree this requirement is accomplished by following the earlier requirement of conforming to the organization structure. If the principles of the delegation of authority and responsibility have been followed, then it is a logical sequence that there is a definite fixing of the point of corrective action when a deviation of control occurs. Therefore the point and direction of this requirement is largely met if the other principles of management have been complied with.

II. Budgetary Operations

Budget policy

In regard to methods of control, a university is not analogous to an industrial concern in one outstanding respect - there can be no comparable methods of inspection. In industry one of the prime sources of information and control is through constant and sometimes close inspection. In a university there is the concept of academic freedom and "sanctity of the classroom" which prohibits any comparable system. Inspections as in industry are not typical or generally acceptable in a university. This statement should not be interpreted to be inclusive of the operational functions for which the business officer is directly responsible, and which he must inspect. For these reasons the budget becomes virtually the only means of managerial financial control which

can be applied all-inclusively to the business affairs of the university.

For a university, as for a business organization, there are two basic types of budgets under which it can operate - the appropriational type and the estimative type.[6] The appropriational type makes funds available to the departments without further control as to the desirability of individual expenditures. Once the appropriation is made the detailed expenditures are completely a matter of departmental discretion. The estimative type of budget on the other hand considers the amount indicated for each department as only a guide and estimate. New expenditures are approved as they occur.

Actually these two concepts of budgets stem from the more basic principle of management regarding centralization or decentralization. It is an accepted principle of university administration that business must be centralized to a certain degree. "Centralized control of business administration is desirable in all institutions of higher learning."[7] About the need for centralized control there is little argument, the problem comes in the degree to which this centralization is to be exercised.

The dangers inherent in too great a degree of centralization were stressed by the Controller of Teachers College, Columbia University in a study concerning the subject:

> Generally speaking, a highly centralized plan of administration of expenditures for other than professional services

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[6] John Dale Russell, The Finance of Higher Education, (Revised edition; Chicago: The University of Chicago Press, 1954), p. 86.

[7] College and University Business Administration, (Washington: American Council on Education, 1952), Vol. I., p. 10.

> is subject to the danger of denying to individuals, departments, and divisions expenditures really necessary for the optimum development of the institution's program, by reason of lack of intimate contact. No single central budget authority can usually know or appreciate the needs of all groups equally well, and inequitable discrimination, though unintentional, is almost inevitable.[8]

This topic was discussed as far as possible with all levels of personnel at various institutions. Possibly more than any other segment of management, personnel had strong feelings on the matter of centralized authority. The composition of the faculty and staff of a university has much to do with this feeling. University personnel by nature are intelligent and thinking people. They have ideas and dreams and want to see those ideas materialize. Any control which tends to prevent this materialization is automatically and naturally resented. On the other hand, this same characteristic should also make these personnel more capable of managing their own affairs and segments of the budget.

The head of one department expressed the sentiments of many in the statement that too centralized and stringent budget procedures have a tendency toward levelized approach and content of the educational patterns within the university. The department head went on to say that too rigid centralization would iron out any ability to use creatively and with imagination the intellectual resources within the university.

The estimative type of budget has the disadvantage that a department does not feel the responsibility for the operation and care of its budget. Since it is only an estimate, the department will not prepare

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[8]Thad L. Hungate, Finance in Educational Management of Colleges and Universities, (New York: Bureau of Publications, Teachers College, Columbia University, 1954), p. 89

its requests as carefully because the department knows that it must once again justify its needs at a later date. Furthermore, since this type of budget is not a firm commitment to the department, but only an estimate of needs, the department cannot feel free to move ahead with its own plans. After carefully developing a new program it may be completely blocked by later action of an arbitrary decision. The estimative type of budget almost completely removes from the head of the department the authority to execute his own programs.

John Dale Russell pointedly described this undesirable situation when he said, "If the executive officer of a department cannot be trusted to administer a budget, he is unqualified for his position. The remedy should be the assignment of this responsibility to some person who has sufficient executive ability to be trusted with a budget."[9] The estimative type of budget therefore is considered to be undesirable, and lacking in all of the elements of satisfactory managerial control.

The disadvantages of the estimative budget have been stressed because through its application many of these same disadvantages can creep into the appropriational type of budget. An appropriational budget is normally made up more than a year in advance of the time of the actual expenditure - in fact from the time of the original request by a member of a department to the final execution, it may be almost two years. For this reason, many changes may take place in the circumstances which prompted the original request. Other expenditures may be more prudent. Therefore if the appropriational budget is adhered

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[9]Russell, op. cit., p. 87.

to too rigidly, then the same disadvantages and frustrations are observed.

Program budgeting

The term "program budgeting" is preferred to the more common term "performance budgeting." The use of the term "performance" to define a budget for the future tends to be confusing. "Program budgeting" appears to be a more descriptive designation of its actual application. However, in this study the concept of each budget is the same.

A program budget focuses attention upon the work or services to be done rather upon things to be acquired such as personal services, supplies, and equipment. These latter items represent the means to an end, whereas the prime object is the program to be accomplished under the concept of a program budget. The budget then sets forth the things that are to be accomplished and, financially speaking, how they are to be accomplished. Such a presentation may be more understandable to those who are not familiar with the operations of the institution.

The major advantage of a program budget lies in its emphasis upon the program and objectives to be accomplished. It is possible to establish certain standards of performance against which the budget can be compared to determine the degree of accomplishment. By emphasis on programs a university can present its budget more clearly to the public and to legislative bodies. These people can perhaps understand the requests for programs better than requests for objects and things. The budget of a university represents the plans and thinking of its administrators. The typical organizational type budget without a program reflection is most difficult to visualize and interpret into objectives

that are to be accomplished. The request for funds is correspondingly less appealing.

The major weakness of a program budget is that it is difficult to understand by those whom it controls. The budget tends to cut across departmental lines. For example, a program in one department may easily involve cooperating activities in several other departments. It is sometimes difficult for a department to determine definitely just where its responsibility lies, which violates that principle of management. The budget must follow lines of responsibility.

The first "Hoover Commission," which made a considerable study of performance budgeting, enthusiastically endorsed the method. However, after the system had been tried extensively in several governmental departments, the Commission was more cautious in its endorsement:

> Although we emphasize the need for a program budget, we also stress the fact that it is but one part of an effective budgeting process. In particular, a strong administrative budget process and thorough reviews of past performance and accomplishment are necessary accompaniments of a program budget.[10]

The findings of this study do not indicate that the advantages of a program budget for a university are sufficient to offset the disadvantages. As has been stressed earlier, it is sometimes difficult for academic personnel to adapt to business necessities of a budget. A system that would be difficult to understand might tend to accentuate the problems of budget control. This was the experience of the government agencies which prompted the above statement of the Commission.

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[10] Budget and Accounting, Commission on Organization of the Executive Branch of the Government, June, 1955, (Washington: Government Printing Office, 1955), p. 29.

Cost accounting

Cost accounting has increased greatly in recent years in industry. However, no similar increase in use has been observed in universities. The nature of the productive enterprise of a university makes measurement of its activities by accounting methods very difficult. In the first place, there is no measure of the worth or the productivity of basic scientific research. Secondly, it is impossible to apply a yardstick or measurement to scientific effort or to measure teaching efforts.

True cost accounting might prove impossible to install in an educational institution. Teachers would be required to submit itemized time slips. It is believed that resistance to such measures might be impossible to overcome in an academic atmosphere.

By contrast, however, cost analysis has become very important in the internal administration of a university. In endowed institutions it is particularly important to know the proper allocation of overhead costs in order that a fair distribution of charges be made between endowed and other sections of the institution. Caution must be exercised in comparing costs of one institution with another. Costs computed in one university may not in any way be comparable with those in another university simply because the bases of comparison or methods of computing may be entirely different. At present there is probably no more standardization of accounting between universities than there is between industries. Interpretations and comparisons must be made with care. It is usually necessary to have very close knowledge of the systems of each of the institutions being compared.

However, cost comparisons from one year to the next within the

same university may prove very beneficial. Such comparisons can give valuable information both for operations and for future budgets. Like program budgeting, however, the writer believes that university systems are not particularly adaptable to complete cost accounting.

The Commission on Financing Higher Education investigated this subject of cost accounting in universities and reported:

> Higher education does not have or practice any systematic form of cost accounting. We have looked into this situation with some care and our own staff judgment is that cost accounting as a systematic procedure for recording the expenditure data of institutions of higher education is not feasible. To say that cost "accounting" is not feasible is a very different conclusion from saying that cost "analysis" is not useful. Rather, cost analysis is vitally important.[11]

Preparation of the budget

Most of the elements which were stressed in Chapter II on planning must eventually be reflected in the budget. It is the instrument of administrative control which carries out these plans. Planning is the starting point of the budget. The actual construction of the budget should be from the bottom up, with guidance from the top down.

More specifically, the guidance should be in the form of estimates and general guides from the top administration. The business administrator must make a review of all of the sources of income and arrive at a probable estimate of income for the next fiscal year. It is conceded that some of these estimates will be subject to many variables and inaccuracies. Nevertheless, this basic estimate must be made in

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[11] John D. Millett, Financing Higher Education in the United States, Commission on Financing Higher Education, (New York: Columbia University Press, 1952), p. 141.

order to determine a reasonable framework within which to work. All of the elements must be considered which were discussed under the topic of financing. It is also conceded that many of these estimates are contingent upon legislative appropriations, upon uncertain grants, and many other uncertainties. However, the business officer is the person normally best fitted to guide the administration in this basic estimate.

Next, the top administration should decide in general terms the research programs and fields of study that are to be furthered in the new fiscal year in addition to the needs of old and established functions and services. In effect the first problem is a top administrative problem of deciding upon broad policies and programs, then interpreting this program into financial terms.

This first step also serves to establish the general direction of operations from the beginning. Such a method has two advantages. In the first place it gives carefully considered direction to the basic plan. In the second place it helps prevent to some degree the problems of allocating the most funds to those who plead the strongest. This first step does not mean that the programs are set. It only means that this is the first estimate of the general area of operations. Such an estimate is vital to the planning of each successive officer because otherwise there is no guide or concept within which to operate. The guide does not prevent his asking for more than the allotted estimate. However, it does place a responsibility of additional justification on any new requests or plans beyond the allotted estimate.

The president is normally the top administrative officer and therefore bears the ultimate responsibility for the budget. As chief

budget officer the decisions of broad areas of operations should properly come from the office of the president. The president issues a directive for preparation of requests for funds to the next administrative level - which normally is that of the academic deans. Accompanying the directive for preparation of requests there should be: (1) general information concerning the budget of the institution for the coming year, (2) tentative and general indications of preliminary allotments to the areas or departments concerned, and (3) information on expenditures of the area or department for the previous fiscal period.[12]

The academic deans then issue a similar guide of broad policies to the department heads. In some cases the department head may give similar guides within his own department. With this broad outline which is given from the top down, it is now possible to build a budget from the bottom up. However, in thus building a budget from the original departmental requests, these requests are more realistic, since they represent the guidance of top administrative directives. Without such guidance the requests might be so unrealistic as to prove practically useless, thus forcing the top administration to make the budget for the department - a fallacy which must be avoided.

Participation in budget preparation is important at every level. This point was previously emphasized in the discussion of planning. However, it must be stressed that in order to make personnel conscious of the budget and feel responsible for it they must be consulted in the planning stage. A much greater feeling of being a part of the

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[12]Russell, op. cit., p. 75.

institution is encouraged by this medium. Budgeting should be a "family affair."

It is particularly recommended that sufficient time be taken at each level of authority to explain the policies and procedures in a personal meeting. Policies change and procedures vary from one budget to another. Unless each level of authority is allowed to discuss and question these matters, misunderstandings are inevitable. Specifically it is recommended that the president - perhaps through the business administrator - discuss in a joint meeting with his deans the policies and instructions of the new budget. This procedure emphasizes the principle of participation. President Henry stressed the need for explanation of budget policies when he wrote:

> Inadequate interpretation of business policies and practices is a common failure in educational organizations. The result is that when a staff member is thwarted by a policy he has never heard of, he gets the notion that it was created on the spot by the office as a special means of ruining his pet project.[13]

Timing of the budget preparation should be such as to allow each succeeding level of authority ample time both to evaluate and to present the elements for which it is responsible. It is a frustrating experience for a department head to have to abide by a budget for an entire year that he had less than a day to prepare. This example may be extreme, but it illustrates the point. It is not enough to contend that the head of a department should know immediately what he wants. It takes time to give thoughtful consideration and presentation of the requests of members of a department. Usually the policies of each budget

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[13] Henry, op. cit., p. 20.

presentation tend to be slightly different and therefore it is impossible to do much extensive preparation in advance.

A suggested budget request form is presented for consideration. (Chart IX). It will be noted that every step of the process is represented so that in its final form the request shows each level of approval. This point is considered important because in discussions with department heads there was a strong desire to have their plans and requests indicated all the way to the top levels of administration. The fact that the request was disapproved at intervening levels does not prevent the form from indicating the type of original request that was made.

One institution studied did not use such a form. Instead, letters of request were transmitted from one level of authority to the next. However, there was no continuity and no one at a higher level ever knew what items the next lower level of authority had disapproved. When the writer questioned this point, the administrator defended the action on the grounds that if the request of a department was disapproved, the next higher authority would not override the disapproval. However, that is not the point. A department head wants to have his desires and plans known as a matter of record.

This statement is not a theoretical point. An actual case was studied where a dean had caused departments to rewrite their requests after he had made his approvals. When the budgets were forwarded to the president, it then appeared the dean had approved all requests. The original requests of departments were therefore never made a matter of permanent record in the requested budget. It is often useful in

CHART IX

PROPOSED FORM FOR BUDGET REQUESTS

Budget Request for Fiscal Year_____

_____
Signature of Dept. Head

Department_____

Fund Number_____

_____
Signature of Dean

Item*	Current Budget	Department Request	Increase or Decrease	Approved by Dean	Approved by President	Comments*

* Space decreased for illustration. More space to be allowed on actual form.

budget considerations of a later year to know that certain items have been requested by a department over a period of time.

A budget form which shows each step of the budget preparation and request gives a complete picture of the various stages through which a budget must be approved. The writer believes that it is sometimes beneficial to the president and to the management team to know what requests of a department have been disapproved by a dean. Furthermore, it may be advantageous to be able to point out that original requests had been reduced before approval of the final budget. For public institutions this point may be particularly true. It may be a very significant point for a legislature to know that the requests of a university had been reduced considerably before final submission to the legislature.

Formulation of the budget

When the budget forms have been received in the office of the president, it is the responsibility of the business administrator to compile the requests and determine the status of the composite budget. At this point the practice varies between institutions as to how or whether the departments are allowed to present and explain their individual requests. In some instances every department is allowed to discuss the request with a budget committee. In other instances the president and his advisors act on the information which is received without personal explanation.

The writer believes that the policy of allowing personal appearance before a budget committee has many advantages. This method utilizes the basic principle of participation which was emphasized in Chapter II on planning. A department head should be given a brief opportunity to

explain the basis of his requests. Financially speaking, this is the most important point of his business year. By being allowed to present his case personally, a department head is made to feel more as a part of the organization. It conveys the personal contact and interest that is vital to the efficiency of the institution. There is a practical limitation of the time which can be spent and the department head must not feel that he is preemptorily rushed through.

At this point, perhaps better than any other, the entire management team has an opportunity to appraise the accomplishments of the different divisions. Here the academic, the business, the student, the public relations, and any other segment of the team can join in reviewing the programs of the institution. At this time a department head can be called upon to account for his budget in terms of accomplishments. The writer believes that the time spent in such conferences is well repaid in general informational value to the levels of higher authority, and in particular will cause a beneficial evaluation of programs by all concerned.

There is one caution that must be exercised by the management team in hearing the budget presentations. Some individuals are adept at polished presentations and can make convincing and appealing pleas. Other individuals may be equally sincere, and perhaps more deserving, but no so eloquent in their presentation. These intangible considerations must be recognized by the committee. It must exercise astute judgment in perceiving the merits of each case.

Approval of new positions and new personnel are normally a continuing obligation of the university. Such approval should be a joint

action of the management team. In the deliberations the academic officer should point out the need and justification (or lack of it) for the position, and the business officer should show the implications of support for the position. The important point is that deliberations of the management team must be balanced and each part allowed to participate in the decisions.

Sometimes adequate provision for support is not provided as the position may demand. Usually extra equipment is necessary, such as office furniture, and similar items. In addition, a new position may mean the use of more supplies - particularly in some of the technical fields. It is therefore necessary to look upon a new position, not just as an added salary, but as a new demand on the budget in related items as well.

Approval of the budget

The final decisions and approvals of the budget are the responsibility of the president (subject to approval by the governing board). However, it is the duty of the business administrator to advise and assist the president in these decisions. In particular, it is the duty of the business officer to give revised estimates of total income which are as accurate as possible. The final approved budget is then distributed to departments through the academic deans. It was interesting to note that one university made quite an event of this distribution of budgets - in one instance even going to the extreme of presenting the budgets at a banquet. It is believed however, that the original meeting and discussion are adequate. The actual distribution of the approved budget is more or less a mechanical affair.

A difficulty is sometimes presented in the final budget if the reductions are made by items rather than in total. If the department is presented its gross amount in a lump sum for the department to redistribute, no such problem arises. For example, a budget is sometimes prepared and presented by a department in various categories - such as salaries, wages, supplies, equipment, and others. In the "trimming" process the chief budget officer must either reduce the requested budget by removing certain items or reducing certain categories. In either event this action presents the problem of making a decision at a level of authority which is not as familiar with the problem as the person who is actually responsible. If a cut must be made in the request (and this is the typical case) the person closest to the problem, normally the department head, should be allowed to make the decision as to where the cut is to be applied.

Allowing the head of a department to make the final distribution of the budget has the advantage of fixing the responsibility for the budget directly at the point of execution. If the department head is not allowed to rearrange his budget after the cut he may not feel the responsibility. He may feel that since the decisions were not made by him, then he is not responsible for the results. This point is stressed because it was particularly emphasized in discussions by heads of departments at three different institutions. The suggested rearrangement of funds by a department head does not apply to funds for salaried or permanent wage type of personnel. Personnel policies and practices are the responsibility of the university management team. A head of a department should not have the prerogative of employing salaried

personnel purely on his own judgment and decision. The reason for this statement is that permanent type personnel tend to constitute a continuing obligation of the institution. Only the central administration of the university should have the authority to obligate the institution for permanent type commitments such as salaries. Therefore, the recommended privilege of rearrangement of the budget applies only to the more flexible obligations such as travel, supplies, and equipment.

The approval of different levels of funds would carry different contingencies too numerous to outline in the budget presentation. For example, if a new piece of equipment is to be approved, then perhaps a greater proportion of supplies than wages is necessary. If the equipment is disapproved, the reverse may be true. The department head is the person in a position to know best the balance that should be effected in any given allocation of funds. If he is not allowed to make this allocation in accordance with his judgment, then he cannot properly be held responsible for the performance and execution of his budget.

The problem of seeing that the department carries out programs in line with policy is not discussed here, as that is a matter of administration other than business. The point here is that once the total amount of allocation to a department has been determined, the department head should have the final authority in determining its distribution. He should not be held responsible for the execution of a budget which he did not make (if cuts are applied as indicated by higher authority). Such action would be in violation of the management principle of coupled authority and responsibility.

Execution of the budget

Although the final responsibility for execution and control of the budget rests with the governing board and the president, the duty is normally assigned to the chief business officer. The carrying out of this function represents a responsibility that can in many ways be more critical than the preparation and approval of the budget. Actually the budget is the financial representation of plans and programs. Its true effectiveness is determined by the people who made the plans. If the restrictions of the control system are applied in such a manner as to produce a sense of frustration in these people, it may largely defeat its own purpose. Hungate emphasized this aspect of budget control:

> The true control of the budget is through the people who administer it. Given information, understanding, cooperation, and help, they can wield a vital influence on the spending program. If they are kept informed of the financial situation and the outlook, they will administer their areas far more effectively than under a system limited to control by mechanization.[14]

It is therefore necessary to establish controls that particularly meet the sixth requirement outlined at the beginning of this chapter: controls must be understandable. Whatever internal system for reporting deviations may be set up, the information which is given to the departments must be understandable. Furthermore, it is important that they know why these controls were necessary.

One method to accomplish this aim is by use of the accounting books of the institution. Normally the expenditure ledger should be set up in such a manner that the budget and the expenditures appear close

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[14] Hungate, op. cit., p. 92.

together for comparison. This requirement automatically means that separate accounts must be maintained for all budgetary items. Deviations from the budget must record and be reported promptly for corrective action. No detailed description of the process will be given here because it is a matter of accounting technique. From the management standpoint, it is sufficient that the system does indicate a constant comparison between budget and expenditures, and that it indicates areas upon which action can be based.

It is the responsibility of the business administrator to keep accountable university personnel informed as to the status of their part of the budget. Monthly statements of accounts is probably the most typical method of accomplishing this purpose. Normally a department does not keep completely adequate records of its funds. However, a department should keep some kind of informal records that enable it to know its balances between reports of the business office. The relationship is analogous to a bank account. A bank will mail statements once each month but in the interval between a running balance of funds must be kept. A department must keep account of its funds in much the same manner.

It is also desirable that the monthly statement from the business office reflect all of the charges to a departmental fund for the period. Such a measure allows a positive check by the department against the correctness of such charges. This in turn assists the accounting department in detection of clerical errors. However, it is recognized that preparing such itemized charges might not be economical in some systems. The accounting methods used by each university must determine whether or

not it is practical to prepare such detailed statements. However, it is considered very desirable if possible.

Budget revisions

The third basic requirement of controls as set forth earlier is that they must be flexible. Budgets, once established, are not and cannot be fixed firmly. Changing circumstances necessitate constant reevaluation of plans and programs. Changed budgets must reflect these new plans. Budget revisions tend to fall into three basic types. The first type is that which requires an increase in the appropriation to a department or organization. Since such an increase must be provided from reserves of the institution, they should be approved by the president. The second type is one which shifts funds between two departments. This type should be approved by the academic dean and by the business officer. The third type of revision is merely a rearrangement of funds within a department. In keeping with the principles of the delegation of authority, it is believed that the academic dean should be the approving authority for the intra-departmental type of revision, but excluding changes of permanent salary or wage funds.

Some publicly supported universities are required to budget and report expenditures by categories of funds - such as salaries, wages, travel, supplies, and equipment. For budgets of this kind, the third type of revision (rearrangement of funds within a department) can become very tedious and cumbersome unless simplified flexibility is provided. Furthermore, adjustments of this type can also impede the normal transactions of business functions. This is true because no requisition should be passed unless there is a sufficient balance in

that particular fund in the budget. If it is necessary to transfer money formally from one category to another through several channels of approval, the requisition may be considerably delayed. In some instances this delay could prove very difficult and even serious for a department.

In his comments on budgetary procedure, Russell outlined a similar recommendation for budget changes:

> An adjustment between items within the budget of a department should be recommended by the chairman of the department and made final with the approval of the dean of the college or school. Adjustments between departments of a college in a university-type organization should be recommended by the dean and made final with the approval of the president. Adjustments between major organizational units should be recommended by the president and approved by the board or a responsible committee of the board.[15]

From the standpoint of sound principles of management this procedure delegates the authority to the corresponding levels of the scalar chain of authority in accordance with the responsibilities involved. It provides a flexibility of control for expeditious processing of work, while conforming to the organization pattern.

III. Other Operational Considerations

Management surveys

Some glowing recommendations have been written of the benefits of management surveys, and there is little doubt that some surveys have proven beneficial. Fortune Magazine reported, "Yale cut operating costs by $400,000 a year on the basis of recommendations made in 1950 by

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[15] Russell, op. cit., p. 83.

Cresap, McCormick & Paget, the leading campus management consultant."[16] The magazine further reports that in about 150 institutions the surveys paid for themselves in operating savings.

Though on a limited scale, the writer has had personal experience with management surveys in industrial concerns. These experiences have indicated that the lack of familiarity by the survey team with the operating characteristics of a concern greatly reduce the effectiveness of the survey - to such an extent that its worth is questionable. This same opinion concerning surveys of universities was expressed by the Director of Institutional Consulting Associates, Mr. Paul B. Gillen, who wrote:

> There are many elements in an educational institution, however, which are very different from the business and industrial world and which require that principles be applied in ways that are fitting. Professional teams often know little about educational philosophy, aims or programs. They assume that knowledge of the business world is sufficient for judging the activities of an educational institution.[17]

However, a combination survey conducted jointly by a team of the university with management consultants to guide and assist has proven effective according to Mr. Gillen. Such a joint project has the advantage of giving the first-hand guidance of experienced university personnel while providing the necessary detached and factual approach of an independent consultant. Such an approach is believed to be more likely to yield beneficial results to a university that desires such a survey.

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[16] Herbert Solow, "Colleges Are Too Cheap," Fortune, September, 1957, Vol. 56, p. 162.

[17] Paul B. Gillen, "Management Surveys," College and University Business, February, 1957, Vol. 22, No. 2, p. 24.

Administrative manual

An operating manual of business procedures will save much time, correspondence, explanation, and misunderstandings of practices of the administration. It is interesting to note that no reference could be found in books of management or university administration which mentioned or discussed the use of operational manuals of procedures. Nevertheless they have been observed by the writer to be in use both in industry and in university administration.

There is a fundamental core of instructions for the operation of any large institution or organization. By reducing these instructions to writing, they become the guiding principles to all members of the organization. In addition, such a set of instructions provides information and prevents needless questions of procedures. As new personnel join the organization they can familiarize themselves quickly with these basic directives. After due time new personnel can be held responsible that they know these operating directives. Such a manual clarifies procedures of one department with another, thus preventing misunderstandings between departments.

The outstanding contribution of an administrative manual is to provide stability and uniformity to procedures. As was stressed in the beginning of this chapter, one of the dangers of lack of understanding of employees and staff members concerning administrative policies is that they will feel a certain decision has been reached in only the particular case which is affecting them at the time. By reference to a manual it presents the ruling in a clearly impartial manner. The person is then aware that the ruling was not just in their

case, but is standard application. Confidence in the administration is encouraged when impartiality is demonstrated and the employee knows a ruling is of a universal nature.

An operating manual should be written in simple non-technical language. In particular the manual should be written in the language which the users can easily understand. The manual should be divided and referenced into various operations and functions so that ready access can be had to needed information.

Systematic revision will be necessary to keep the operating instructions current. Since the changes are constantly occurring it should be the duty of the assistant to the vice-president of administration to see that the manual is kept current.

One of the ways in which the manual saves correspondence and explanations is the simplicity of reference to a particular section. For example, if a department has violated a particular instruction, or is questioning a particular procedure, it is not necessary to write a lengthy letter of explanation. Usually reference can be made to the section of the manual which applies to the question and no further explanation is necessary. Administrative details are thus greatly reduced.

Administrative schools

Yearly administrative schools are in use by one division of a university. The school has been found to be most helpful and productive of better understanding of practices. Once each year for one full working day all secretaries and administrative personnel are required to attend. The school has become so popular that almost all the

department heads and a number of other faculty members also attend.

The object of such a school is to review current practices and emphasize new policies of administration. Much benefit and knowledge has also been gained merely through the bringing together of the various departments into free group discussions of problems. Both the administration and the employees learn much of each others problems in these discussions.

One of the outstanding benefits of the school has proven to be the fact that departments learn by association with one another at the school that their problems are not unique. They discover that the same problems and the same difficulties tend to be universal. Administration on the other hand is able to determine where the most troublesome areas appear to be through the group discussions.

There has been a very noticeable decrease in administrative burdens of questions and communications since the use of the school. Old and new employees alike learn much through this medium. Many older employees may discover simpler and easier ways of doing jobs - or may discover that they have been doing a job wrong for years. New employees learn early the correct and simpler forms of performing their functions.

For all of these reasons an administrative school is believed to be a very important part of the business administration training of a university. In addition it would appear that a university should be a leader in this type of administrative technique.

IV. Summary

Controls are needed in a university as a counterpart to planning. They are necessary in order to see that plans made by the management

team are carried out as expected. However, controls should conform to sound principles of management and as far as possible should be preventive rather than corrective.

The budget is the most effective management tool in the university. However, incorrect or arbitrary application of the budget can be most destructive to initiative and cooperation. On the other hand, cooperation and initiative can be improved by participation of the proper personnel in the budget preparation. During the preparation there is also an excellent opportunity for the management team to review the programs and work of the institutions. At this time department members can be required to review and justify their programs. Through this method many benefits other than the budget can be attained toward accomplishing the objectives of the university.

A department or division of the university must have coupled authority and responsibility in the execution of its budget. In order to hold him responsible, the head of a department must have a part in the formation of his budget.

Finally, operating policies are a problem of human relations. The effects of these policies upon personnel must be considered carefully. Employee relations will become increasingly critical as rising competition for personnel forces rising salaries and strained budgets. To meet this crisis the business administrator must keep the management team informed with accurate facts to provide the basis for well-informed decisions.

CHAPTER VI

PLANT OPERATION AND EXPANSION

In Chapter I it was shown that there must be a vast expansion and replacement of plant facilities of higher educational institutions during the next decade - roughly approximating 13 billion dollars. In Chapter II the general policies and practices of planning for expansion and operation of higher education in the future were explained. Each of these discussions forms the foundation for the considerations of plant operation and expansion. This chapter will explore the problems of producing both efficient and effective plant operation with necessary concurrent expansion. The application of some of the principles of business management will be explored as a possible guide to the solution of these problems.

I. Planning for Expansion

Policy determination

The determination of policies for major plant expansions are the responsibility of the entire management team. Long-range plans, building programs and building locations are the responsibility of the entire team. The execution of these policies and their actual implementation tends to be the responsibility of the chief business administrator. Following the principle of delegated authority, the governing board makes the major policy determinations then delegates the authority to carry out the plans to the officers of the institution.

Operation and maintenance of the physical plant on the other hand tends in most cases to be the responsibility of the chief business officer. Normally he will make the policies, with perhaps broad guidance from the governing board or from the president. A study by the Louisiana Commission on Higher Education indicates that in some instances the president has the responsibility for building maintenance and sometimes even for grounds maintenance.[1] However, as indicated in the chapter on organization, this latter system does not seem to conform properly to the principle of effective division of work. It is believed that the president of an institution should not be directly responsible for such details of maintenance.

The exact role of the business administrator will vary widely between institutions as to his place in policy determination about plant operation and expansion. In some instances he may be the major factor in deciding policies. At the other extreme he may simply be instructed to carry out decisions made by higher authority. As an important member of the management team it is believed that he should be consulted and should assist in the policy discussions. Since the implementation of many of these policies will later be his responsibility, he should participate in their formation. His experience can lend valuable assistance to the management team. Furthermore, by having been present at the discussions, he will be better informed as to the intent of the policies. Very often it is important to know the intent of a directive

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[1] Plant and Business Management for Higher Education in Louisiana, Volume V. (Baton Rouge, Louisiana: Louisiana Commission on Higher Education, 1956), Exhibit IV-A.

to put it into effect properly.

Plant expansion may sometimes overshadow the proper importance of other functions of an institution. Building programs show outward signs of progress and an administration usually gets much publicity from such programs. The rising demands of increasing enrollment will make this plant expansion even more imperative. However, it must stay in balance with the rest of the program of the university. One of the most important of all policy decisions is the determination of what areas of the physical plant are to be expanded. This decision must be the result of the combined efforts and deliberations of the entire management team. No one area can be allowed to predominate unless it has complete justification of its needs.

In his studies of space utilization and expansion John Dale Russell particularly noted the dangers of an unbalanced expansion program:

> There is a curious tendency in higher education to magnify the importance of the physical plant. A president oftentimes measures the success of his administration by the extent to which new buildings have been added to the campus since his inauguration. A department head takes enormous pride in having a new building constructed for his department, and in any large institution there is terrific competition among the various academic units as to which will get the next new building. Because other, less visible, needs may be neglected in the glorification of plant facilities, it is desirable to check every proposal for plant expansion by a cold-blooded appraisal of needs based on a study of the utilization of existing facilities.[2]

The master plan of campus expansion

In accordance with the management principles of both unity of

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[2]John Dale Russell, "The Utilization of Building Space in Institutions of Higher Education," College and University, Summer, 1957, p. 482.

direction and of order, there should be a master plan of future campus expansion. In effect it is the map of the future. It is a picture of the projected plans and ideas of the management team. This master plan should project the layout and placement of buildings on the campus as far into the future as judgment seems practical. Normally the primary responsibility for such a plan is placed with a committee of the governing board which acts in close coordination with other members of the team.

For maximum effectiveness and usefulness, the master plan must be flexible enough to meet changing needs. However, it must not be merely a picture to be changed as easily as a new idea occurs. The master plan is essential in order to maintain direction and unity of purpose in the construction program. Many costly errors can be avoided by this simple expedient of putting future plans into evidence.

The general style of architecture and the location of buildings are usually determined by the governing board after consulting with other interested members of the management team. Sometimes a standard style of architecture will be used for all buildings throughout a university. However, many institutions have begun to break with tradition in this regard in order to build more modern and practical structures.

The location of buildings on the master plan should conform to general policies of utility of efficient usefulness. General purpose type of buildings, such as the library, student center and administration building should have a central location. Service units such as the stadium, athletic fields and dormitories should be on the periphery.

Parking areas in most universities are becoming a critical item and are occupying an ever-increasing amount of space. In general they should be located on the fringe, but as far as possible accommodating general purpose buildings such as the auditorium.[3]

The writer believes that the preservation of the beauty of college campuses is a major policy determination in the period of expansion of plant facilities. There will be an ever-increasing pressure for space which requires that more buildings be placed in smaller areas. Efficiency alone as a criteria does indicate that buildings must be very close together. However, culture and appreciation of beauty are also a vital part of education. The beauty of the American college campus has its place in education. If universities are to become merely cold factories of learning, they can be constructed in a mass or they can be a straight-up office-type building, like the University of Moscow. However, it is believed that this styling would lose much of the tradition and refinement of education which has become so much a part of the American way of life. No suggestion is made here that there should be any hesitancy to break with tradition on any point of college planning, provided it serves a better purpose. However, it is believed that the beauty of a campus does serve a vital purpose. The preservation of that beauty should be strongly considered by policy-making bodies. Once the beauty of a campus is destroyed, it can seldom be restored. Proper planning can to a large degree avoid these mistakes.

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[3] College and University Business Administration, (Washington: American Council on Education, 1952), Vol. II, p. 19.

Space utilization

It will prove difficult for any university to appeal for more funds for additional facilities if a survey shows that inefficient use is being made of its present plant. For this reason it appears wise for a university to make its own survey first in order to improve the efficient use of space. Independent surveys conducted by a legislature or by the governing board might reveal embarrassing deficiencies. Therefore it seems imperative that a university make certain that it is making efficient use of its present available apace.

It is believed that a survey of utilization of space can be conducted best by members of the staff of the institution rather than by some outside disinterested firm. Independent survey agencies might have the advantage of impartiality. On the other hand they have the distinct disadvantage of not being familiar with the operations and requirements. There would be no objection to using outside agencies for such a survey provided it was integrated with some university personnel who were familiar with the problems. The same factors should be considered for employment of an outside agency as were considered for an internal management survey. These factors were discussed in Chapter V.

There are many advantages in using the institution's own staff. In the first place, the personnel are more familiar with the local problems and areas. A committee composed of staff members can survey with an intimate understanding of institutional problems. When outside firms are used, everyone tends to lose interest as soon as the survey is concluded. Local members of the survey team encourage constant and

continuing studies and create more interest internally in the efficient use of space. Any unfamiliarity with the methods of such a survey will be offset by familiarity with local problems.

It is important to remember that any survey yields data only in statistical terms. It only forms a base upon which wise administrative decisions can be made. The survey is not an end in itself, it is only an instrument which can direct decisions with more certainty.

Some surveys indicate that universities are not at present using their space to the fullest advantage. One such survey made by John Dale Russell studied space utilization in a group of ninety institutions. His survey assumed a normal work week of forty-four hours with no night classes. He found that the average use of rooms was only 20.4 periods per week. "If the average use of rooms, 20.4 periods per week, is compared with this theoretically possible use of 44 periods a week, it would be reported that the average institution is only 46 percent efficient in the use of classrooms."[4]

A similar survey conducted at Northwestern University at Evanston, Illinois used the station student hour as its basis of measurement. That system measures the length of time each possible space is occupied by a student during the day. It not only takes into account how many rooms are in use, but also measures how effectively those rooms are used. The results of the survey were similar to those of Russell:

> On this basis, (the station student hour), the classrooms are but 29 percent occupied, and the laboratories, 26 percent. Thus, on a calculated potential our space is used between a

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[4]Russell, op. cit., p. 492.

> quarter and a third of a forty-hour week. This is an application of donors' money which should give us concern, and points to the excessive costs to the University for maintaining space so infrequently used.[5]

A space study should be a well organized and coordinated effort. It should compile detailed information about each room in each building, including data of the size, capacity, and actual use made of the room. It should show a ratio of time and space factors to indicate the efficiency of utilization of each room. If a classroom is half-filled for four hours of an eight hour day, then its use is 25 per cent of the potential.[6]

From the foregoing evidence of surveys it is apparent that universities must make a study of their own individual situation. Every effort must be made toward more effective utilization of existing facilities.

What are some of the methods of effective space utilization? After conducting a survey as outlined above, it will most likely become apparent that some areas of utilization of space need further attention and study. This problem was discussed with several administrators. In one university which was visited the system of decentralized scheduling was in effect. Under this system a building is referred to and treated as "the chemistry building" for example. Either the dean or the head of the department may be in charge of the building and space allocation is his responsibility. Such a system may lead to inequities in the allocations

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[5] Harry L. Wells, Higher Education is Serious Business, (New York: Harper Brothers, 1953), p. 160.

[6] College and University Business Administration, op. cit., p. 23.

of space. In addition there is little or no control for emergency purposes. That is, scheduling of special conferences or courses must be approved by a number of offices, thus making clearance difficult. Antagonism often grows between one department and another simply because one feels that it is not allowed adequate space while another has surplus space. This antagonism grows when individual deans or department heads are responsible for allocation of areas within individual buildings.

Centralized scheduling of space provides a much more effective control and utilization of available facilities. The exact point of responsibility for this duty varies. In some cases centralized scheduling is done by the academic officer, in others it may be done by the business officer. In either event the basic policies are the same and the actual execution of the plan is done by the registrar or a similar office at the direction of the higher official. It is believed that the function is best handled through the academic division of administrative duties. The function tends to deal more with the scheduling of classes and space than with business matters. Nevertheless, its successful execution directly affects the business officer, so some attention will be given here to some of its aspects.

The department of institutional studies or the registrar furnishes the academic dean with data on classes and courses. By careful study of past experience with these classes it is often possible to decrease the number of sections and courses. Effective combinations can greatly affect the efficiency of the teaching force. There is a constant effort on the part of the academic dean to keep the sections, classes and

courses at the maximum number of students in each which will be consistent with efficient teaching.

In an interview one academic officer expressed the belief that the psychology and attitude of the professor is one of the most difficult problems to overcome in efficient scheduling of space requirements. Some professors conscientiously feel that a certain number of students is all that they can teach effectively. This number may range from very small to very large classes, but in many cases it is not based upon any fact other than the professor's personal feelings. Efficient size of laboratory classes has proven almost impossible to determine, because laboratories present such an extreme variety of needs and usages. The problem therefore has been one of constant education of the faculty. The officer emphasized that at his university the management team attempts to explain the necessities and importance of some of the changes which are necessary in space allocations.

"Appropriated space" proves to be a problem. That is, organizations will move without specific permission into a section of a building or classroom and over a period of time the room becomes "theirs." Centralized scheduling of classrooms eliminates this type of appropriation. Sometimes the problem of moving these organizations from their long-accustomed space proves to be very difficult. One of the solutions to this difficulty is to provide areas that can be used jointly by the organizations. Lockers can be provided for their equipment. Through a little coordination several organizations can use the same room and have their own equipment at the same time. The need for this type of meeting room is peculiar to a university, but is essential to the

organizations.

An effective argument about the use of space was used by one academic officer. He pointed out to his faculty that indirectly the the inefficient use of space had its effect upon salaries. Since the university had a limit on the total available finances, then less money was available for salaries if it must go toward building and maintenance of more space. Conversely, if space was used more effectively, then more money was available for salaries. The argument seemed to be effective.

Perhaps the greatest potential for more effective utilization of space is in more diversified scheduling of classes. Many institutions are not yet using afternoon and evening classes to the fullest advantage. Professors in many instances have become accustomed to morning classes only and are reticent to accept other schedules. As pointed out at the beginning of this chapter - the utilization of class space must be on a full week basis. Schedules must be equalized as far as possible so that classes are held on the basis of an eight hour day without regard to afternoon or morning classes.

Size of classrooms presents a difficult scheduling problem. In some universities there has been a tendency to build too many large classrooms. In the planning stages every effort must be made to anticipate the average size of classes and build to this average. For many reasons, primarily of location and grouping, it is impossible to schedule only large classes in large rooms. Therefore the use of any particular room may be ineffective at certain hours, while it may be used to a maximum at others.

Air-conditioning has made available much space in buildings that was formerly not usable. Offices and classrooms without outside openings are possible through the use of air-conditioning. To some degree the cost of the air-conditioning can be offset by this reclaimed space.

The location of buildings is an important consideration of space utilization. By having like interests located close to each other more effective exchange of areas can be accomplished. In addition, there are many innovations of building structure which are currently under experimentation. For example, experiments are being conducted with movable walls. A wall can be completely reversed. Such a wall would allow experiments or displays to be set up on one side while a class was going on on the opposite side. With little difficulty or time lost the wall could be reversed to the class side. In some types of classes this innovation may prove to be very useful.

Expansion of physical facilities

The general and broad policies of plant expansion have already been explained. However, due to their great importance to business administration, it is desired to treat somewhat more specifically some of the considerations of expansion of the facilities.

Perhaps the primary danger of building construction during the next decade may be that pressures will cause inadequate planning and a tendency to use temporary expedients rather than long-range solutions to the problems of building. This same caution was expressed in a study by the National Education Association:

> One imminent danger in construction of college buildings under the pressures of expansion is that the building will be done too shoddily and without full reference to educational

> functions to be served. It is not desirable to build now the academic slums of the 1970's, nor to clutter campuses with "permanent temporaries."[7]

Time is of utmost importance in planning a building program. Normally it takes several years between the idea and the completion of a building. It takes time to arrange for the finances, to consult about and complete the drawings of plans, then to build and equip a building. For these reasons the need must be anticipated far in advance in order to allow adequate time for the necessary details for execution of the program.

Trends of educational functions must be taken into account in the buildings of the future. With the advent of technological aids such as films, radio, television, tape recorders and other media, it should be visualized where the use of these units can or should be provided for in the plans of the construction program. Through the assistance of the institutional planning office, and any other survey media, projections should be made as far into the future as practical to determine what areas of instruction the students of the future will seek. Simply building more buildings to create more space based upon the same plans as in the past will not meet the new demands of the future effectively.

Financing of building programs

The broad aspects of finance and fund-raising were covered in Chapter IV. However, there are some problems of finance which are

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[7] Higher Education in a Decade of Decision, (Washington: National Education Association and the American Association of School Administrators, 1957), p. 133.

peculiar only to the building program. Since these are of direct significance to the business officer, they will be covered somewhat more specifically, though by no means exhaustively.

Legislatures in some states have begun to follow the policy of financing residence halls and other service facilities for students from tax-supported sources. Closer examination will show that the net result of this policy is to cause funds to be diverted from the basic function of education. That is, it is believed that the tendency will be to reduce other appropriated amounts, or at best not to increase them as needed. The net result is that the primary needs will suffer in order to benefit the expansion program. Another deviation from traditional financing of physical facilities is in the form of enabling legislation which pledges tuition receipts to help underwrite construction of student housing.[8] The same objections as previously mentioned apply to this latter method of finance. Building funds should be over and above all other operating needs of an institution, otherwise normal operations will have to bear the increased load.

In a study of capital expansion programs Ralph W. McDonald pointed out the dangers of allowing funds to be diverted from their primary purpose:

> The increased use of appropriated funds and tuition receipts for construction of dormitories and other student service facilities is certain, in my judgment, to undermine the quality of the educational program of public colleges and universities

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[8]Ralph W. McDonald, "Successful Capital Expansion Programs in Publicly Controlled Institutions," Current Issues in Higher Education, 1956, (Washington: National Education Association, 1956), p. 258.

> that resort to this drain upon their availability of funds for teaching and research.[9]

The use of endowment funds for dormitories, buildings or similar construction has been ruled improper unless the endowment is specifically given for that purpose. There is a strong temptation to use endowment funds in this manner, and some universities have found themselves in the embarrassing position of having used funds for purposes for which they were not intended. The General Education Board investigated the use of endowment funds for plant purposes and rendered the opinion that such use was improper:

> It is the judgment of the General Education Board that funds received by a college earmarked "for endowment" cannot be properly invested in plant or buildings of the college used for any of its general or charter purposes, whether such plant or buildings be income-producing (e.g., dormitories, or laboratories for whose use fees are charged) or not.[10]

One recommended method of dormitory financing is the use of revenue bonds which pledge the proceeds of rentals toward the retirement of the bonds. This method is meeting with increased acceptance. There is no diversion of funds from educational channels, and the bonds are self-liquidating.

Another recommended source for plant facility financing is the use of Federal assistance. Some of the implications of Federal financing have been discussed in a previous chapter. Here it is desired to mention a few considerations in regard to plant expansion financing. Financing of a new building is a non-recurring type of fund-raising.

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[9] Ibid.

[10] College and University Business Administration, op. cit., Vol. I, p. 152.

Therefore it is not subject to the fear of withdrawal at a later date as is true of operating funds. The President's Committee on Education Beyond the High School recommended the use of Federal assistance in the field of plant facility expansion. In particular the report noted that this field of finance meet many of the objections to Federal assistance:

> Assistance by the Federal Government toward construction costs is particularly desirable for at least three reasons. It would help institutions to concentrate more on financing adequate faculties. It can be terminated when enrollments level off, without disrupting institutions' current finances. It contains little if any possibility of Federal control of educational programs.[11]

II. Operation and Maintenance

Operation and maintenance policies

Closely allied with utilization is effective use of space through adequate maintenance. Buildings in a poor state of repair often reduce the total usable space. Perhaps the most serious tendency on the part of administration toward maintenance is to delay needed repairs in favor of a current expenditure which appears to be more pressing. Although it is evident that repairs and renovations are cumulative, the temptation is sometimes too great to put them off to a later date. Such a policy eventually presents a problem that may become too big for the finances of the institution. It is believed that a definite and regular program of maintenance must be adhered to. No current demands short of a dire emergency should cause deviation

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[11] Second Report to the President, President's Committee on Education Beyond the High School, July, 1957, (Washington: Government Printing Office, 1957), p. 83.

from that plan. The management team must provide a systematic budgeting of funds for adequate maintenance. As new facilities are added to the plant inventory, a percentage of the cost of that facility must be added to the maintenance budget.

Maintenance of grounds is becoming increasingly critical - not due to size, but due to the relative importance. As discussed at the opening of this chapter, the beauty of the college campus needs to be preserved. As more buildings crowd the available space more attention needs to be given to the beauty of that remaining campus area. Flowers have been discontinued on many campuses because they become very expensive to maintain and normally require more skilled labor. However, adequate beauty can be attained through the use of shrubs and well-kept lawns. Mechanized equipment can greatly increase the efficiency of the latter type of campus while at the same time presenting a nice appearance.

Again illustrating the principle of participation in planning, the superintendent of operations and maintenance should be consulted in the planning phase of new construction. His experience can help to avoid many areas of trouble that have been experienced in maintenance. The upkeep of the completed buildings will become the responsibility of the superintendent. Therefore it is sound policy to have him participate in the planning.

Some methods of effective operation and maintenance

Some authorities divide building maintenance into several classifications for the purpose of getting a better division of the work and duties, thus giving more specialized assignments of work forces. Perhaps

the most widely accepted classification of maintenance is preventive, long-term, and emergency.[12] In this terminology preventive maintenance refers to the periodic servicing of buildings and it is a constant process. Long-term maintenance refers to the major rehabilitation and renovation programs which are all-inclusive in their scope of repairs. Emergency maintenance refers to the daily unpredictable calls for immediate action type of repairs.

Control and guidance of operations and maintenance should be based on an adequate set of records. Experience ratings of repair calls and operating costs should be established for each building. Such ratings are possible only by recording each call and each job in relation to the building in which it occurs. By establishing such records it is possible to determine the cost of maintenance per square foot for each type of building. This information is advantageous in two ways. In the first place, it serves as a check on a given building as to when major renovations are necessary. In the second place, the information is valuable in considerations for planning of new buildings. It is possible to predict in advance the maintenance costs for various types of structures from these experience records.

Standardization of construction specifications and materials will help to reduce maintenance costs. For example, if only one or two types of floor tile are used, then the problem of inventory is greatly simplified. Matching of broken tile is easier and less expensive. The same principle applies to paints, furniture, and other materials. However,

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[12] College and University Business Administration, op. cit., Vol. II, p. 29.

it might be noted that the use of only one color throughout a university would prove monotonous and dull. Therefore this recommendation is only to the extent that variety must be limited to a few selected items.

Methods and policies of maintenance were discussed with the superintendent for a large state university. A complete renovation and repair of each building was scheduled approximately every five to six years in his program. Every needed change and repair was made at that time to recondition the building to new standards. If necessary (and it generally was) the utility system of the building was completely renewed or revised. It had been found that it was more economical to make these complete renovations than to continue indefinitely with preventive and emergency type repairs. It had been found that the total number of repair calls would increase about 5 per cent per year for each individual building. After calls have reached an average of about one hundred per month for any single building, then it was no longer economical to make emergency repairs. In some cases the renovation schedule for such a building might be moved forward and done earlier than anticipated. However, care was exercised in such a shift of schedule that it did not seriously alter the normal rate of repair of other buildings.

The work force of the operations and maintenance department is normally engaged primarily in emergency and preventive maintenance. Major renovations and repairs usually call for specialized labor and services and tend to be better adapted to a contractual service. If the normal force is employed on these major jobs there tends to be too much variation of work. For example, normal repairs within a university tend to be at a reasonably constant level. A normal size

work force can be maintained to meet these emergencies. However, if major jobs are given to that same work force the level of operations is no longer consistent. Therefore it appears best to use outside contractors for special one-time type of jobs or renovations of a major proportion.

Regular maintenance inspection programs should prove beneficial in both detecting needed repairs and forecasting future repairs. Too often inspection programs are of a sporadic nature done without the benefit of standardized procedures. Check lists or some similar aids should be used that will insure adequate attention to the various needs at all locations. This type of inspection should not be designed merely as a check on budget requirements, but rather should be a standard continuing type of inspection designed only to keep check on needs. In conjunction with the experience records previously indicated, it should be possible to foresee needs and plan for adequate maintenance.

III. Summary

The entire management team of the university determines the policies for major plant expansion, but the implementation of these plans tends to be the responsibility of the chief business administrator. A master plan of expansion should project these ideas of the administration as far into the future as practical in order to establish stability and direction of planning.

The first step toward plant expansion should be to make the maximum effective use of present space. Space utilization surveys should be conducted to determine the efficiency of use of space and to

determine ways of improving this efficiency. These surveys can best be conducted with the university's own personnel, although professional assistance may also be used.

Planning by university administrators must begin far in advance of the actual need of a facility or building. Sometimes much time is required for consultation and drawing of plans, then more time is required for construction. Plant expansion must be kept in balance with other functions of the institution. Such expansion must not be done at the expense of proper support for other facilities and proper operation of the university.

Effective operations and maintenance can materially increase the amount of available space by keeping that space in usable condition. A definite program of maintenance is necessary and temporary emergencies must not cause that program to be abandoned. Standardization of specifications and materials greatly simplifies the problems of maintenance, but too much standardization can destroy the beauty of the institution.

The financing of new plant facilities must not come from sources which tend to deplete or substitute for funds that are needed for the general educational program. Funds for such expansion must be separate and distinct from the regular operating program.

CHAPTER VII

LEADERSHIP

The subject of leadership has been placed last in this study because a full appreciation of its importance must be based upon the recognition of all of the problems and basic needs of management that face university business administration during the years of decision that lie ahead. Leadership is the dominant factor in planning, organizing, financing and fund-raising, operational policies, and plant expansion. It is the factor which must permeate all the functions of management in the expanding activities of higher education.

The writer believes that the attainment of leadership is the greatest single need and its application is the greatest single solution for the problems of university business administration in the crucial years of the next decade. The late Dean Smith said, "In the final analysis, we are dealing not only with space, dollars, buildings, and programs - we are dealing with people. It is a problem of human relations to which leadership is the ultimate answer."[1]

It has been emphasized throughout this study that universal basic principles of management will be the approach to the problems of university business administration during the coming years of expansion. The success of this approach will be dependent upon the element of

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[1]Charles E. Smith, Dean of the University, Louisiana State University, Interview, January 27, 1959.

leadership and how effectively it is located and applied.

A university administrator and his staff can be clothed in all the formal authority which a governing board can give, but the degree of effectiveness of the administration is ultimately measured by the degree of acceptance with which the employees receive this authority. Herein lies the true value of leadership, it appears to be the answer to securing full collaboration of employees. A true leader does not need the formal authority of title, but through the application of the qualities of leadership he creates the will to cooperate in others. Therefore it is important that all members of the administrative staff reexamine their own qualities of leadership. They must constantly strive to improve these qualities both in themselves and their subordinates. In this way their efforts will be more effectively multiplied through others.

This need of cooperation was well expressed by Barnard when he wrote:

> Nevertheless, a critical examination would reveal that the weakest link in the chain of cooperative effort is the will to collaborate. Though we are loath to admit it, our hands are held back again and again in doing things known to be technically or commercially feasible, because of the fear that the human beings with whom we work will not sufficiently collaborate with us or with each other.[2]

I. Qualities of Leadership

What then are these qualities of a leader that make him so important to the administration of a university, and how can these qualities be developed? Since the progress and success of the institution is

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[2]Chester I. Barnard, Organization and Management, (Cambridge, Massachusetts: Harvard University Press, 1952), p. 106.

dependent upon this leadership, it is important that the entire management team evaluate itself and its potential leaders in an effort to improve its application of leadership. One can only conclude that these attributes of leadership are important at all levels of the organization. Any reference to the chief business administrator of a university is for convenience and it is not meant to imply that the principle does not apply at other levels of executive responsibility.

Donald T. Campbell at the University of Ohio has conducted extensive research on the subject and has found many definitions of leadership. His own definition is that, "Leadership may be defined as the contribution of a given individual to group effectiveness, mediated through the direct efforts of others rather than himself."[3] His findings indicated that neither popularity nor the confidence of superiors or subordinates was an adequate measure of the qualities of leadership of an individual. Instead, the morale of the group appeared to be the most determining factor. The report found that:

> The interpretation (of data) is to be focused upon morale of the group rather than upon the popularity of the officer or the confidence which the men or the officers and superiors have in him. This finding...is one of the important findings for the general theory of leadership in the present study.[4]

The writer prefers the more descriptive definition given by the United States Army that leadership is, "The Art of influencing and directing men in such a way as to obtain their willing obedience,

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[3] Donald T. Campbell, Leadership and Its Effects Upon the Group, Bureau of Business Research Monograph No. 83, 1956, (Columbus, Ohio: The Ohio State University, 1956), p. 1.

[4] Ibid., p. 60.

confidence, respect, and loyal cooperation in order to accomplish the mission."[5]

There have been many studies through the years to determine just what attributes make the leader. These studies have included even the measurements of height, weight, age, appearance, and almost innumerable characteristics.[6] However, no study has ever conclusively advanced any one set of characteristics as the only qualities of leadership.

In the application to a university, a study of Chester Barnard appears to embrace the essential elements that most other studies also include. Barnard lists five qualities of a successful leader: vitality and endurance, decisiveness, persuasiveness, responsibility, and intellectual capacity. He elaborated further to say, "The important point is that the qualifications of leadership, however discriminated and however named, are interacting and interdependent."[7] These qualities are believed to be so pertinent and so important to the ultimate success of university business administration that each one will be discussed and emphasized in detail. It is believed that the success of a university staff in accomplishing its mission will be in direct proportion to its ability to assimilate these qualities of leadership.

Vitality and endurance

Mental and physical endurance are not often associated with the

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[5]Military Leadership, Department of the Army Field Manual FM 22-100, (Washington: Government Printing Office, December, 1958), p. 7.

[6]Cecil A. Gibb, Leadership, (Hanover, N.H., Dartmouth College, 1953), p. 22.

[7]Barnard, op. cit., p. 92.

activities of business management of a university. Nevertheless the characteristic is necessary. Business management does not run smoothly and well-ordered. There are times when there is too much pressure and too many responsibilities to discharge. If most of the basic principles of management have been observed, then pressures will be minimized. Nevertheless they will occur and the business administrator must be physically and mentally able to withstand these pressures with calmness and forebearance. Any show of instability or outbursts of temper inevitably causes loss of respect and materially decreases his effectiveness. In the face of these pressures the administrator must set a good example of cheerfulness and enthusiasm for his employees. His attitude largely determines the attitude of the members of the organization. Confidence and optimism encourage those working with the leader.

A university administrator cannot expect more of an employee than the example which he exemplifies himself. He must maintain a certain degree of dignity in order to engender respect - but at the same time must not create a pompous attitude or appearance. Fayol also emphasized this same requirement of a manager to set a good example:

> When a manager sets an example of hard work no one dare arrive late, when he is active, courageous and loyal he is imitated and, if he knows how to go about it, will succeed in making work enjoyable. But bad example, too, is contagious, and in coming from above it has more serious repercussions on the unit as a whole.[8]

Strangely enough, enthusiasm and vitality can be a detriment to the leader. Enthusiastic and conscientious concentration upon a job

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[8]Henri Fayol, Administration Industrielle et Generale, translation by Constance Storrs, (London: Sir Isaac Pitman & Sons, Ltd., 1949), p. 100.

can cause a leader to become so engrossed in the infinite details that he loses the broad contacts required of his position and which are invaluable to efficient management. Therefore, it is necessary that the leader enjoy his job and be enthusiastic, but at the same time he must periodically free himself from its requirements in order to keep a fresh outlook on the entire scope of the problems facing the university.

Decisiveness

Decisiveness of the administrator creates confidence in employees. This quality by no means implies an off-hand impulsive decision merely for the sake of making a decision. It does, however, mean that after careful consideration of the factors involved, a clear-cut decision and accompanying instructions are given.

In a university as in any business organization, it is necessary that a leader know when to make a decision. Two elements enter into this determination. First, the leader must know whether or not the decision is at the level of authority and responsibility for his action. He must know whether the decision should be referred to higher authority, or sometimes referred back to lower levels for action. On the other hand if he refers all decisions, then no leadership is being exercised. Secondly, the leader must know whether there are sufficient facts upon which to act, or whether other details should be determined. It is not always possible to have all the facts that might be desired. However, it is necessary to know when sufficient information is available to warrant action.

Courage is another trait not often associated with university

business administration, and yet a very necessary one. In this respect, courage is the mental quality that recognizes the fear of criticism but enables the administrator to follow his own best judgment and convictions even in the face of possible criticism. The Ohio State studies, previously cited, clearly showed that an effective leader is not always popular. Many times it takes great courage to incur popular disfavor by taking a firm stand or enforcing a rule that may be for the good of the institution, but which meets with opposition.

Sometimes mistakes are made and it takes courage to admit these mistakes. It is a decided weakness on the part of any administrator to constantly make excuses or blame errors on others. Such actions do not fool the employees, but rather create a loss of respect. Employees soon sense this feeling of insecurity and weakness. Admiration and respect are gained through forthright moral courage. In the coming period of great expansion in higher education it is inevitable that mistakes will be made by administrators. How they handle themselves and the moral courage which they display will largely determine their effectiveness as leaders.

Persuasiveness

Persuasiveness is the ability to get people to do what needs to be done and to make them like doing it. The university business office is constantly working with others whose methods are sometimes contrary to good business practices. Faculty and staff members of a university are not always business-minded, and sometimes cannot understand the necessity for certain procedures. These persons must be persuaded and taught to follow proper methods. In most cases it is the manner of the

persuasion that is more important than the correction itself. Correction must be made without creating resentment, shame, or embarrassment to the person corrected.

Almost every person can recall instances in which he has been subjected to an unkindly type of correction. Sometimes the sting is never quite overcome. It is imperative that the business office never be guilty of untactful handling of a situation by any of its employees. Irreparable damage and lack of cooperation can easily be created through even one instance of discourteous conduct.

The trait and reputation of giving justice must be present to enable a university leader to persuade others to carry out his instructions. The business officer finds himself in administrative control over many segments of a wide and complex organization. It is inevitable that he will have more interest and knowledge in some areas than in others. It is a human trait to have prejudices both for and against certain areas and ideas. The officer's reputation and respect for justice will be in inverse proportion to his prejudices. It is sometimes necessary that the business officer be overly cautious and conservative to avoid any possible display of favoritism.

In order to persuade others, the administrator must give credit unselfishly to his personnel. There are few rewards more gratifying to an employee than to receive recognition for his work or his ideas. This principle was previously cited when discussing motivation of employees. However, if a superior fails to give credit, or worse, if he takes the credit for an idea which was originated by an employee, resentment is created and further ideas stifled. The business officer

must give credit unselfishly in order to secure cooperation and establish his position as a true leader.

Listening is an integral part of the art of persuasion. A person is far more willing to be persuaded when his own ideas have been heard. In addition, the leader can learn many valuable points simply by listening. Dr. Wesley Wiksell recognized the importance of listening for management when he wrote:

> As a leader you must give management a true picture of what the employees think and what they want. In order to do this you will have to listen if you want to get a man's viewpoint and if you want to make each man feel a part of the team.[9]

Responsibility

The quality of responsibility for a university leader implies that he must have integrity, dependability, and loyalty. Integrity must apply not only to the moral value which protects funds and investments, but also to the integrity associated with daily living. Unless a man can be relied upon for absolute truthfulness and honesty in his dealings with others, he cannot be relied upon at all. Administrators at every level must act upon advice and statements from their employees. Unless this information is completely reliable it is useless to the administrator. The difference must be recognized between honest errors and intentional misrepresentations. The first instance is inevitable in transactions of business, the second is unpardonable on the part of any person. The bond of integrity is reciprocal. If employees learn

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[9]Wesley Wiksell, Do They Understand You? (New York: The Mac Millan Company, to be published January, 1960), p. 99.

that the leader has absolute integrity, they react accordingly with willingness, loyalty, and respect.

A university business administrator faces one real danger to his reputation for dependability and responsibility. This danger occurs when he is approached with requests during the pressures of daily business. Some persons present these requests at very inopportune moments. It can even happen that this inopportune moment was intentionally designed to catch the executive off guard. The administrator sometimes almost unconsciously gives an answer (while his thoughts are on some other problem). If the executive later is unable to comply with this hastily given agreement, then he may be accused of undependability or lack of responsibility. To avoid this dilemna, the administrator should try to keep himself free of routine and detail so that the possibilities of such occurrences are minimized.

The ability to accept responsibility also conveys the need for the business officer to be loyal. A leader must unhesitatingly carry out instructions with which he perhaps may disagree. It is a human characteristic to relay this disagreement to subordinates. And yet, in direct proportion to such conveyance of dissatisfaction, disloyalty is created. The most common example of this type of disloyalty is portrayed by the superior who tells the subordinate that a certain job must be done, but he is against the idea. He points out that it was due to orders of higher authority. As a matter of fact, this example is observed so much in some persons that apparently it was never their idea to require a subordinate to do anything. The business administrator must never relay any personal dissatisfaction with instructions of higher authority.

By not displaying this type of disloyalty the leader is rewarded in that the employee usually senses and knows the full explanation anyhow, and has more admiration for the leader because of his acceptance of responsibility.

The research studies of Dr. Campbell at Ohio State University found that proper acceptance of responsibility and delegation of authority had much to do with the feelings of employees toward their leaders. "Responsibility and authority are recognized as important aspects of the administrative situation...When superiors assign responsibilities, but fail to delegate sufficient authority to act, subordinates are likely to complain that their 'hands are tied'."[10] The reciprocal relationship of delegated authority is necessary for full cooperation of personnel.

Intellectual capacity

It is generally accepted that superior intelligence is necessary for leadership. However, it is interesting that in a study of the subject by Cecil A. Gibb it was noted that the differential of intelligence between the leader and the worker which he directly controls must not be too great in order to have maximum effectiveness:

> In general, leaders are more intelligent than followers but one of the most interesting results emerging from the studies in this area, is the discovery that they must not exceed the followers by too large a margin, for great discrepancies between the intelligence of leaders and followers militates against the mergence of the leadership relation.[11]

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[10]Campbell, op. cit., p. 65.

[11]Gibb, op. cit., p. 25.

The subject of "intellectuals" arose in almost every interview which the writer conducted and at almost every administrative level. The point was stressed that university academic personnel were different, and that they tended to be extremely intelligent and great emphasis was placed upon this intellectual ability. The university business administrator is primarily concerned with business matters, but the people with whom he works are principally academic. Often the two areas may seem to be in conflict. The stress by academic personnel on their superior intellect can be difficult in some cases. Barnard in his study of leadership recognized this point - though perhaps rather bluntly and untactfully:

> Excessive emphasis upon the intellectual is made by followers who are intellectuals. Thus it is often difficult for them (experts and professionals of many kinds) who have no administrative capacity (or interest) to follow even extraordinary leaders. This form of conceit is frequently accompanied by exhibitions of temperament and disruptiveness, and by false, ruthless, and irresponsible professions of individualism and freedom, especially professional and academic freedom.[12]

However, by observation and experience, the writer has found it easier to work with university personnel than with any other group. It is true that misunderstandings and individualistic tendencies do arise - as they do in all relationships. University personnel soon recognize the soundness of good policies (or they are able to convince the administrators of unsound policies). In any event, cooperation is easily secured primarily because of their superior intellect. Therefore, intellectualism is a factor to be recognized in university business management, but it is actually a benefit and makes cooperative efforts

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[12]Barnard, op. cit., p. 99.

easier to achieve.

Intellectual capacity implies the use of good judgment by an administrator. It is the ability to weigh all factors and possible solutions and reach a sound decision. Experience and knowledge improve this ability to reach sound decisions, but some people seem to have an inherent trait that also guides them. As has been mentioned earlier in this study, and as will be stressed again, training can best be done in many cases by actually filling a job in a temporary status. Knowledge, experience, and the foundation for good judgment can best be learned in this way.

II. The Development of Leaders

It is the responsibility of the chief business administrator of a university to train and develop leadership in the business staff. Henri Fayol emphasized this responsibility of a manager when he wrote:

> By showing them discreetly without acting for them, by encouraging them with appropriate praise, by sometimes sacrificing his own personal vanity for their benefit, he can quickly transform men with latent abilities into employees of the first water.[13]

The starting point for developing good leaders is first to attract good personnel. Many educational institutions do not pay enough to their business employees to attract those who are capable of performing the quality of leadership which will be necessary during the coming years of decision. To complicate this picture further, in many institutions the business personnel are made "second class citizens" to the

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[13]Fayol, op. cit., p. 103.

academic faculty. As was stressed in Chapter III on organization, the business staff must have status equivalent to those with whom it works in order to carry out effectively its administrative duties. Unless the compensation and recognition are on a reasonably equal basis, and are competitive with similar positions in industry, it is not likely that the right caliber of personnel will be attracted or retained by the institution. The inevitable result will be the loss of effective leadership in business administration.

Training and experience

The lack of training and experience present a familiar problem in a university when selecting an administrator. For example, a professor may spend a lifetime becoming a foremost authority in the field of chemistry. In recognition he is made head of the chemistry department. He is then confronted with a completely different set of problems and circumstances than those encountered in the field of chemistry. The characteristics and qualifications which made him an outstanding authority in chemistry possibly have not equipped him for the new administrative duties to which he is now committed. Many times failure follows with resulting ill effects upon all concerned.

To the business officer it means that he must work in matters of business with a person not trained in nor understanding administrative procedures. Within the business staff, unless persons are trained in advance for positions of responsibility they may not be ready and qualified to take such positions.

When training and experience have not equipped academic personnel or business personnel to fill a new administrative position it is

sometimes disastrous to make such a promotion. Failure in the new position could even result in dismissal which is a loss to the university and possibly an injustice to the individual. Sometimes personnel simply will not follow another individual who lacks the traits of leadership, but who may be an authority in his field. However, dismissal or even demotion of such a person has adverse effects upon the entire organization. Barnard had this to say about the adverse effects of dismissal of a respected figure in the organization:

> And when there has been failure of followers to follow, were not our only recourses to change the leader or possibly to change the followers?...But this process (dismissal) is extremely delicate; for though followers cannot follow those who cannot lead, those who have been superior leaders embody or personify the spirit of an organization and represent the aspirations of their followers. Crude dismissal at any level of organization destroys morale and ambition and thus does violence to the organization itself.[14]

A university can avoid this type of ill-fated promotion in many cases by administrative training and experimentation in filling the position by "on-the-job" training. It is readily acknowledged that it is not always possible to do such training in advance. However, under the majority of circumstances such training is possible. By putting a man in a given job with the understanding that it is for training purposes only, many advantages are gained. In the first place, it is known from the beginning that it is a temporary move. Therefore no harm is done to anyone when he reverts to his original position. In the second place, it is possible to decide by observation whether or not the individual can adequately fill the job should the necessity ever arise. And finally, such substitution gives an individual a better appreciation of the over-all and broad problems. He is better

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[14]Barnard, op. cit., p. 107.

able to cooperate and understand his place in the organization.

Illustrating the above point concerning experience in filling a job and an appreciation of what it involves, the writer once heard the president of a university describe his own experience. He said that when he was controller of the university he was very able to run the president's job, probably much better than the president. Now he was president, and he was not nearly so sure, since now he knew what the job involved.

It is therefore believed to be expedient for the university business officer to assist his junior officers by teaching them or seeing that they are taught other jobs to which they might progress. The effectiveness of his own leadership will be multiplied by the increased understanding and cooperation of his junior executives. This principle of leadership was illustrated by the U. S. Army in its instructions in the subject when it directed leaders as follows:

> Consider not only the leadership that you exert, but also that of your junior leaders. The quality of your leadership is reflected in the junior leader's ability. Take every opportunity to teach your junior leaders the fundamentals of leadership and their application in order that they may become more effective.[15]

Philip Selznick, in discussing leadership in a university, wrote that it was the responsibility of the administrator to set goals for the personnel and to infuse the ideals of these goals into the organization at many levels. However, a warning was voiced that a leader must not allow organizational achievement to be his sole concern:

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[15] Military Leadership, op. cit., p. 67.

> But he (a leader) fails if he permits sheer organizational achievement in resources, stability, or reputation, to become the criterion of his success. A university led by administrators without a clear sense of values to be achieved may fail dismally while steadily growing larger and more secure.[16]

Indications of (or lack of) leadership

Every business officer, whether of a university or a commercial firm, probably has noted that some sections of his organization seem to move in calm easy orderliness. The outstanding characteristic of these sections seems to be the ease and efficiency of dispatching work. In many cases it is difficult to detect that any leadership is being exerted. Most likely outstanding leadership is in effect with resulting proficiency. Many times these individuals work in such a quiet effective manner that their efficient efforts are not realized unless they leave the section. Superior leadership in business administration must recognize these individuals with financial rewards if possible, but in any event their efforts must be recognized with appreciation and approval.

High turnover of personnel in a department is sometimes an indication of poor leadership. An office that is subject to too much pressure through overwork or lack of planning, normally has an unpleasant atmosphere. It is a human trait to try to leave such a situation. Therefore when work does not flow smoothly and disorganization and dissension is present, turnover of personnel tends to rise. Effective leadership tends to smooth out these difficulties with improved morale and efficiency.

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[16] Philip Selznick, Leadership in Administration, (Row, Peterson, and Co., Evanston, Illinois, 1957), p. 25.

III. Summary

This chapter has advanced the belief that leadership is the paramount necessity in university planning, organizing, financing and fund-raising, operational policies, and plant operation and expansion. The application of the qualities of leadership is the force which will determine the effectiveness of the functions of university business administration.

Some of the qualities of leadership which a university business administrator should possess are vitality and endurance, decisiveness, persuasiveness, responsibility, and intellectual capacity. Whereas they are by no means all of the necessary traits, these tend to be representative traits of a leader.

The development of leaders for university administration is a responsibility of the management team. Prior training and experience can best be gained by temporary use of individuals in "on-the-job" training. Sometimes these temporary substitutions and training periods can avoid ill-fated promotions. In addition, junior administrators can better understand the problems of their superiors if they have had the opportunity to observe by temporarily assisting in or filling the higher position.

University personnel by training and experience do not tend to be particularly interested in business procedures. For this reason it is important that the entire business staff exercise superior qualities of leadership to promote congenial relations and effective business procedures.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

This study has found that in the coming years of decision, particularly the next decade, the colleges and universities of America will face their greatest challenge in history. The challenge will develop because, unless some people are to be denied its benefits, higher education must be developed and expanded far beyond anything in all of its previous history.

Surveys have been cited which show that by 1970 enrollments will have approximately doubled. Research in all fields, particularly space and nuclear research, is already making insatiable demands on the resources of higher education. With enrollments doubled, plant and physical facilities must be expanded by approximately 13 billion dollars in present day construction costs, which represents about one-half as much construction as in all the previous history of higher education. Administrative and academic personnel must be greatly increased in numbers, perhaps even doubled, to meet the demands of this expansion. Operational costs will greatly increase. They may also double the present levels of expenditures.

This tremendous expansion presents a challenge to university business management to meet and provide for these needs effectively and efficiently. Interviews with university administrators at almost every level revealed that the business problems of expansion appear to divide themselves into areas of planning, organizing, financing and

fund-raising, operating, plant operation and expansion, and finally the need for adequate leadership to accomplish the expansion.

The principles of management were shown by the study to apply equally to a university as to other types of organizations. The determination of major policies for the application of these principles was shown to be the responsibility of the entire management team. This team was defined to include the governing board, the president, the academic and administrative deans, and any other major administrative officers.

I. Planning

In this study planning was found to be equally important for a university as for a commercial business and the same principles apply in securing effective operations. Since recognition of the problem is one of the basic principles of planning, university administrators must be able to recognize and concentrate on those needs which are the most important.

The study showed that as plans in a university are carefully conceived, they must also be carefully controlled to assure that events conform to those plans and accomplish the objectives. However, the controls must be flexible enough to allow for necessary changes in the course of events without wandering aimlessly from the intended goals. Plans should be periodically evaluated after they are made in order to assure that circumstances or events have not changed which in turn would require a change of plans. Planning should stay in balance, that is, certain areas must not be allowed to overshadow others in

importance unless it is done by considered policy. Short-range needs and pressures should be made to contribute positively toward the long-range objectives.

Participation in planning was found to improve the quality and perception of the plans and to make the faculty and staff feel a part of the enterprise. Participation by others does not relieve the business administrator of any responsibility for decisions, but it does secure more willing cooperation and understanding by those who execute the plans in the university.

Personnel administration within a university presents unique problems of planning because of the relationship of nine-month and twelve-month employees and the necessity of keeping an equitable balance between pay and benefits of the two groups. These personnel considerations have further been complicated by psychological effects of emphasizing lagging salaries in higher education. Increased demand and short supply of teachers is creating increased competition for personnel with resulting upward pressures of salaries. University administration should emphasize and provide fringe benefits to attract and hold faculty and lessen personnel problems.

Radioactive materials and data processing systems present new challenges for planning by the management team. They require new concepts of planning since these fields are so revolutionary and broad in their potentialities.

Some problem areas which directly affect university planning cannot be controlled, but must be recognized as to their possible effects upon accomplishing the objectives. The trend toward junior colleges

and branch universities must be considered in future planning for higher education. Though sometimes irrelevant, political activities can have drastic effects upon programs of state universities. Trade union activity may increase and affect university planning.

The study indicated that perhaps the most important of all planning activities is the selection of the strategic factors facing the university. To minimize lost effort university administration must be able to select those factors which are most important and guide the activities of the institution accordingly.

II. Organization

The investigation found that possibly due to the academic background and experience of its administrators university organization structures have not tended to be distinct or well defined. Principles of management indicate that clear definitions of relationships are necessary in order to mobilize and direct the forces effectively. Increasing pressures of administration in coming years will necessitate that more attention be given to effective organization structures.

Attention was directed by the study to the fact that more recognition must be given to the individual in order to enhance his effectiveness. The framework of the organization of a university represents people and their place in society. The university is no more effective than the combined efforts of the individuals of whom it is composed.

It was found that in some universities the actual application of authority nullified the lines of the organization structure and the principles of delegation of authority. This delegation must be real

and must have balance and control to prevent one segment of the organization from having a disproportionate part in the decision-making.

For some unknown reason universities were found not to have training programs for their administrative personnel. Training will not only better prepare the organization for emergency or promotion replacements, but will secure more effective cooperation of personnel through a better understanding of their place in the structure.

III. Financing and Fund-raising

The study indicates that other public agencies, particularly in state governments, have secured proportions of governmental funds far exceeding those of higher education. A public well informed as to the needs of higher education appears to be the single greatest necessity in financing and fund-raising.

Planning, particularly through proper budget preparation, is the foundation for the requests to and the education of the public for the needs of education. While enrollment is a major factor in forecasting of needs, the public must be made aware that many factors other than enrollment, particularly research, enter into the requests for funds.

Tuition and fees from students were found to present an inelastic demand and have little effect upon enrollment. Raising of fees will raise net revenues but may be contrary to policies of the institution. Effective administration must clearly identify fees rather than to use the subterfuge of hidden charges under other names. However, the most pressing economic consideration in enrollment of students is the cost of living which represents as much as five-sixths of the budget of a student.

Federal assistance to education has been in continuous existence in many forms since 1862, therefore sudden withdrawal of any other than defense contracts is not likely. Because of the emphasis on physical sciences, Federal assistance in some areas has had a tendency to influence curricula in that direction. Caution must be exercised by universities that they do not incur permanent type obligations supported by assistance which is of a temporary nature such as a contract for only a specific period of time.

State and local government support of higher education has risen greatly, but not in proportion to its support of other state agencies such as highways, welfare, and others. More effective presentation of needs to legislatures is necessary. In particular, more effective budget preparation and explanation appear to be necessary. Academic dignity of universities normally precludes outright political-type campaigns for funds, but effective contacts with legislators must be maintained.

Alumni funds, endowments, and private gifts are growing in importance, particularly to private universities. However, indiscriminate fund-raising activities can have disastrous results. Proper preparation and information were shown to be essential backgrounds to these fund-raising efforts.

Corporation giving appears to be the greatest potential source (other than government sources) of new funds for higher education. Corporations have given only 0.6 per cent in contributions of all kinds whereas income tax deductions would allow 5.0 per cent. Furthermore, corporations probably have a greater interest in the products of higher

education than almost any other group. In addition, civic and community interests are an impelling force for higher levels of giving. University administration should make efforts to acquaint corporations with its needs and the benefits which the corporations can gain through contributions to higher education.

IV. Operational Policies

This study has advanced the idea that operational policies and control within a university are largely matters of human relations in seeing that events conform to plans. Therefore, since controls are applied both to and with humans, they must be understandable and flexible controls. They should govern only those matters which need to be controlled and report deviations quickly and economically, and must assure that corrective action is taken. Control policies and regulations should emphasize preventive as well as corrective measures. To assure uniformity and understandability these policies and regulations should be written and available to all personnel. Through this means a more impartial application of rules is possible for administrators.

The budget is the most important single control tool of university business administration. Through its application many of the principles of management are effected. In particular the degree of centralization of management decisions can be controlled through the budget. The budget should be used as a guide, not as a rigid control. Therefore it must be flexible enough to permit simple revision, and yet not be subject to irresponsible change.

Through the budget preparation process university administration

has an excellent opportunity to familiarize itself with the many programs as well as to make an equitable distribution of funds. Through participation in the budget preparation process university personnel understand and are able to cooperate better toward the intended objectives.

Accounting procedures must be adequate to report deviations from the budget, but not so burdensome as to prevent economy of use. Program or performance budgeting and cost accounting have some useful aspects, but are not applicable to university accounting procedures in their entirety.

V. Plant Operation and Expansion

Basic policy determinations of plant operation and expansion are the responsibility of the entire management team. The implementation of these policies tends to be the responsibility of the business administrator. Master plans of future expansion reflect the policies and decisions of the management and project these ideas into the future.

Planning for expansion begins with plans for better utilization of present space. Space surveys are necessary and are best conducted by university personnel possibly with professional assistance. More effective methods of space utilization must be developed, particularly in the scheduling and composition of classes. Adequate and efficient maintenance is necessary to utilize fully the present available facilities and promote better morale of the faculty and staff. Standardization of construction and materials within reasonable limits aids more economical maintenance.

Preservation of the beauty of the American college campuses will be an increasing problem due to pressures for more space. This beauty should be preserved as far as possible as a cultural and integral part of education.

Financing of building programs should not be done by utilizing funds from other basic areas of education. Sources of funds for expansion should be apart from the normally appropriated funds and tuition receipts which are available for research and teaching. Self-liquidating bond issues with revenues from rentals is an effective financing method. Federal assistance for building programs is desirable and should be sought by university administrations which need such assistance.

VI. Leadership

Leadership is the dominant factor which must permeate all the functions of management in the expanding activities ot higher education in the coming years of decision. The qualities of leadership, vitality and endurance, decisiveness, persuasiveness, responsibility, intellectual capacity, and others, must be developed and used in university business administration.

Indications of leadership (or lack of it) make themselves noticeable in a university in the morale, discipline, esprit de corps, and proficiency of the personnel. Sometimes the most effective leadership is scarcely noticeable because of the efficiency and smoothness of accomplishing tasks. University management must acknowledge effective leadership with financial rewards, but even more important it must recognize effective leaders with appreciation and approval.

To a large degree the success of business management in meeting the challenges of the next decade will depend upon how successfully it can locate leaders and train personnel in the qualities of leadership.

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VITA

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Thomas Edward Glaze, son of Thomas Frith and Lillian Cargill Glaze, was born on the twenty-sixth day of November, 1914, in Elizabeth, Louisiana.

He attended public school and graduated from high school in Alexandria, Louisiana, in January, 1932. From January, 1932, until June, 1932, he attended the Chicago Musical College, Chicago, Illinois. He entered Louisiana State University in September, 1932, and received the Bachelor of Science Degree in June, 1936. From September, 1936, to June, 1937, he attended The Harvard Graduate School of Business Administration, Boston, Massachusetts.

After three year's business experience with a firm of Certified Public Accountants, he entered the United States Army in December, 1940. He served six years in the Infantry and Military Police Corps in the United States, and as Provost Marshal of the Iceland Base Command. He holds the rank of Colonel in the Military Police Corps.

Between June, 1947, and October, 1954, he was employed as comptroller and business manager of an automobile dealership, vice-president and general manager of a plumbing contracting firm, and vice-president of a semi-banking and credit institution.

In October, 1954, he became Assistant to the Director (for business affairs) of the Louisiana Agricultural Experiment Station where he is presently employed. In January, 1955, he enrolled in the Graduate School of Louisiana State University and is now a candidate for the degree of Doctor of Philosophy.

EXAMINATION AND THESIS REPORT

Candidate: Thomas Edward Glaze

Major Field: Management

Title of Thesis: University Business Administration in Years of Decision

Approved:

L. C. Higginson
Major Professor and Chairman

George H. Mickey
Dean of the Graduate School

EXAMINING COMMITTEE:

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Date of Examination:

January 7, 1960